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ABSTRACT

This bibliography contains citations, abstracts, and ordering information for 505 dissertations pertinent to the education or training of adults. Studies are classified by broad subject headings used in the ERIC Clearinghouse on Adult Education. Each section of the classification is identified by a four digit number, with a one, two, or three digit number for each entry. (Dissertations guided by members of the Commission of Professors of Adult Education bear an asterisk.) Author, institutional, and methodological indexes are provided; evaluation studies are identified by an "i" in the last index. In terms of the number of cross references, the principal subject areas are: types of programs (24.1%), institutional sponsors (16.4%), adult education as a profession (11.9%), processes of program planning and administration (11.3%), and (with 10.6%) learning environments and instructional methods or techniques. Also represented are adult learning, education for particular clientele groups, personnel and staff development in adult education, comparative or international adult education, and (less than 1%) kinds of devices, materials, and facilities. (LX)

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ADULT EDUCATION DISSERTATION ABSTRACTS: 1963-1967

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A national organization for individuals as well as institutions dedicated to the development of unity of purpose in the adult educational movement; the production of available knowledge about adult education for the membership; the continuous effort to alert the nation's key leaders and the general public to the need for continuing education; the establishment of a home base for those who make adult education their chosen life's work.

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Adult Leadership is a national magazine published monthly, except July and August, specifically for all adult educators, and for persons interested in adult education. It provides a reservoir of ideas and techniques in continuing education through articles, special sections and regular features.

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December 1970

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INTRODUCTION

INTRODUCTION

This compilation contains citations, abstracts, and information for ordering 505 dissertations pertinent to the education or training of adults completed during the five calendar years 1963-1967. A first supplement covering the years 1968 and 1969 will be available shortly.

The studies are classified by broad subject headings used in the ERIC Clearinghouse on Adult Education: each section of this classification is identified by a four-digit number. Each entry has a one-, two-, or a three digit item number. Cross references are provided both to closely related sections and to other pertinent studies. Dissertations guided by members of the Commission of Professors of Adult Education are marked by an asterisk. Author, institutional and methodological indexes are provided. Using the definitions of Fred Kerlinger and George Mouly, the methodological index identifies all studies done by the following methods: experimental; descriptive; historical; methodological. Evaluation studies are designated by a small "i".

Each citation contains: a consecutive item number; title; author's name; institution where the research was completed; degree attained, if other than Ph. D.; University Microfilm order number and price for microfilm or xerographic copies; number of pages; year.

Most of these dissertations may be ordered from:

University Microfilms
300 North Zeeb Road
Ann Arbor, Michigan 48106

University of Chicago dissertations may be obtained on microfilm from:

Department of Photoduplication
Swift Hall
University of Chicago
Chicago, Illinois 60637

University of Wyoming dissertations may be borrowed from:

Interlibrary Loan Service
University Library
University of Wyoming
Laramie, Wyoming 82070

Locating other adult education dissertations. A composite list of all persons who have received degrees under the guidance of the Commission of Professors of Adult Education appeared in the Spring, 1966 issue of Adult Education and has been kept up-to-date in each April issue of Adult Leadership thereafter. These lists contain only the student's name, present position, university and year of graduation. Information on the dissertation itself must be

obtained from Dissertation Abstracts covering the appropriate year. The annual listing published by Phi Delta Kappa may also be useful, especially since it contains lists of studies in progress.

Research Studies in Education: A Subject and Author Index of Doctoral Dissertations, Reports, and Field Studies, and a Research Methods Bibliography. Phi Delta Kappa, Inc. Bloomington, Indiana. Annual.

Canadian degree research may be located through the following compilation, which is planned for annual publication.

Degree Research in Adult Education in Canada, 1969. Draper, James A., Comp. and Yadao, Fausto, Jr., Comp. Ontario Institute for Studies in Education, Toronto, Dept. of Adult Education 46p. 1969.

Several universities are making a commendable effort to make known their adult education research reports. We are aware of the following publications.

Dissertations in Extension and Adult Education; Cornell University 1948-1970. Leagans, J. Paul New York State Univ., Ithaca. Coll. of Agriculture at Cornell. 29p. 1970.

Bibliography of Research in Adult Education and University Extension; Conducted at the University of Wisconsin, September 1966--June 1968. Joint Office of Study, Research and Development in Adult Education and University Extension. Wisconsin University. EDRS Order No. ED 026 555; price in microfiche \$0.25, in hard copy \$0.95. 17p. 1968.

Graduate Research in Adult Education and Closely Related Fields at Florida State University, 1950--1966. Carpenter, William L. and Kapoor, Sudarshan. Florida State Univ., Tallahassee. EDRS Order No. ED 010 681; price in microfiche \$0.50, in hard copy \$4.40. 86p. June 1966.

If abstracts are desired, the best retrospective source is the Annual Review of Adult Education Research which appeared in each Summer issue of Adult Education from 1955 through 1967. These compilations include few dissertations outside the Commission of Professors of Adult Education group and seldom contain University Microfilms ordering information.

Beginning in 1968 an Annual Register of Adult Education Research and Investigation has been compiled by the ERIC Clearinghouse on Adult Education for publication by the Adult Education Association of the U.S.A. These contain both dissertations from the Professors' list and many others culled from Dissertation Abstracts. The 1968 edition only is still available for \$2 from the Adult Education Association, 1225 - 19th Street N.W., Washington, D.C. 20036. The 1968 edition (ED 023 993, MF \$0.50; HC \$3.68) and the 1969 edition (ED 030 774, MF \$0.75; HC \$7.60) are available from the ERIC Document Reproduction Service, National Cash Register Company, 4936 Fairmont Avenue, Bethesda, Maryland 20014.

**ADULT EDUCATION DISSERTATION RESEARCH:
A DESCRIPTIVE ANALYSIS OF 505 STUDIES**

ADULT EDUCATION DISSERTATION RESEARCH: A DESCRIPTIVE ANALYSIS OF 505 STUDIES

What subjects are typically examined by adult education dissertation writers? Where do these studies come from? What research methods are most widely used? Are there discernible trends in subjects, methods or in the sources and volume of dissertation research production? Simple, analytical sorting and counting exercises related to the 505 studies in a compilation covering the five year period, 1963-1967, provide some answers to these questions.

The data contain no spectacular revelations or surprises and are less amenable to clever commentary than we had vaguely hoped. Nonetheless, they give a more descriptive view of this large research effort than our "impressions" have given in the past. And, we think the analysis can be extended to reveal trends in later years, as we compile the intended two-year supplements.

WHAT WAS STUDIED?

The only question that really matters ultimately, of course, is "What did these 505 researchers find out, useful to the task of adult education?" Our classifying and counting efforts obviously cannot answer that question for it requires substantive analysis of the findings by scholars and researchers throughout the field. Some of this information analysis is underway, with help from the ERIC Clearinghouse on Adult Education (ERIC/AE), and we hope the compilation will help many others to digest, summarize, synthesize and disseminate information from these studies. This information analysis and interpretation is just now the most urgent and useful research related task, the capstone of research effort.

We can, however, specify in a general way what the dissertation writers studied. We simply counted the number of entries related to several broad categories of a subject classification used in ERIC/AE. Since many studies are pertinent to two or several subject areas, the compilation contains many cross-references, so we counted references in each area, rather than the simple number of abstracts printed in each category. Here are the results.

24.1% PROGRAM AREAS OF ADULT EDUCATION

Adult basic, literacy and secondary education; academic and community service programs in higher adult education; continuing education in technical and professional areas; management development and supervisory education; labor education; occupational training of adults; home, family, consumer and parent education; arts, crafts, recreation; liberal and cross-cultural education (ERIC/AE categories 5200-7150.)

16.4% INSTITUTIONAL SPONSORS OF ADULT EDUCATION

Focus of interest appears to be on the extent, nature and problems of adult education work in a particular sponsoring agency:

colleges and universities; public schools; Cooperative Extension; armed forces; business and industry; voluntary agencies; etc. (ERIC/AE categories 7500-8550.)

11.9% ADULT EDUCATION AS A PROFESSION

Studies of information sources; philosophy and national policy; legislation and finance; planning and coordination at the local, state or national level; history and biography. (ERIC/AE categories 0000-0550.)

11.3% PROCESSES OF PROGRAM PLANNING AND ADMINISTRATION

Assessing educational needs of adults; determining and refining objectives; recruitment, selection, motivating and serving students; counseling and guidance; use of advisory boards; administrative practices; evaluation. (ERIC/AE categories 1500-1890 and 4300.)

10.6% LEARNING ENVIRONMENTS AND INSTRUCTIONAL METHODS OR TECHNIQUES

Principles of community development; residential education; teaching and learning styles and preferences: individual and group learning methods; audio-visual and media related methods. (ERIC/AE categories 2200-3250.)

7.3% ADULT LEARNING CHARACTERISTICS

Mental and perceptual abilities of adults; psychological and personality correlates of learning; age and sex differences in learning; sociological variables in learning and participation; studies of general participation habits and patterns. (ERIC/AE categories 1120-1300.)

7.3% EDUCATION OF PARTICULAR CLIENTELE GROUPS

Programming and work with particular age, sex or aptitude groups; the economically disadvantaged; racial and minority groups; physically, mentally or socially handicapped. (ERIC/AE categories 4600-5000.)

6.5% PERSONNEL AND STAFF DEVELOPMENT IN ADULT EDUCATION

Studies of staff development, inservice training; training of volunteers and paraprofessionals; graduate training and adult education as a field of study and research. (ERIC/AE categories 0900 and 4000.)

4.5% INTERNATIONAL PERSPECTIVE IN ADULT EDUCATION

Programs and methods of adult education in foreign countries. (ERIC/AE categories 9000-9950.)

.1% ADULT EDUCATION MATERIALS, DEVICES AND FACILITIES

(ERIC/AE categories 3400-3600.)

The distribution of subjects studied seems to reflect the three basic concerns which draw persons to a long-term, professional interest in adult education: (1) interest in some particular group of adults being served or in a program area; (2) concern with organizing, developing, supporting and administering

the work of a particular sponsoring agency; (3) interest in building or transmitting the knowledge base which supports the profession.

We could not detect any significant differences in the general pattern of subjects studied by the dissertation writers from 1963 through 1967. Although the Vocational Education Act was passed in 1963, the Adult Education Act in 1966 and the Economic Opportunity Act in 1964, they apparently had little impact on research done through 1967. Much work stimulated by these pieces of legislation was carried out in public schools, Manpower Development Training Centers or in business and industry; areas from which adult education graduate students are seldom drawn. Probably, however, it was simply too soon to detect the influence on dissertation research of the large-scale war on poverty and adult illiteracy. We definitely see this concern for the disadvantaged adult in the 1968 and later studies.

No substantial differences in subject matter can be detected between studies guided by members of the Commission of Professors of Adult Education (marked in the compilation by an asterisk) and the almost equal number of studies done outside this group.

Known research predilections of famous professors can very faintly be discerned in some cases. Some universities have more clear-cut interest patterns, but they are less definite than we expected. It is apparent, even in this period, that the interests of "extension" training programs and the more general degree programs are rapidly merging. We think that the personal interests and vocational intentions of the students themselves largely guide the choice of dissertation topics. Many, perhaps most of the Ph.D. students, especially in this period, came from careers in some part of adult education and probably, for the most part, went back to those same parts, often to the same agencies.

Some striking gaps in research are apparent, especially the lack of research on educational materials, devices and facilities. Others are obscured by the breadth of the categories; there are, for example, practically no dissertations written about the occupational training of millions of adults in business and industry.

IS DISSERTATION RESEARCH INCREASING?

During the years 1963 through 1967, the number of dissertations completed each year definitely tended upward and the number soared in calendar year 1967. The number done each year under the guidance of the Commission of Professors of Adult Education held relatively steady and the increase was in studies done in other departments of the same institutions or in different universities. An overall examination of the number of studies reveals a slight decrease between 1963 and 1964 (86 to 77), followed by a 30% increase between 1964 and 1965 and a 49% increase between 1966 and 1967.

TABLE 1
TOTAL NUMBER OF STUDIES DONE (1963 - 1967)
BY COMMISSION OF PROFESSORS AND OTHERS

GROUP	63	64	65	66	67	TOTAL
Commission	48	48	68	43	50	257
Other	38	29	37	50	94	248
TOTAL	86	77	105	93	144	505

WHERE IS THIS RESEARCH DONE?

Of the 505 dissertations in the compilation, 257 were supervised by Professors in member institutions of the Commission of Professors of Adult Education, - a division of the Adult Education Association - composed of universities which grant adult education degrees or devote specified amounts of staff time to adult education teaching. A master list of these graduates is maintained at the University of Chicago for the Commission; all these dissertations (even some which seem irrelevant in subject) have been brought into the 1963-1967 compilation (except two or three which could not be located) and marked with an asterisk.

An almost equal number of dissertations (248) were located from other departments and institutions, work by students getting degrees in another subject but doing their research in adult education related areas. These are our "invisible colleagues" in other fields and their number rose sharply in 1967. Though these projects range across many disciplines and come from many universities, they do not radically differ from the adult education dissertations in subjects studied. They are somewhat more likely to relate to one of the program areas or to the category we have called "adult learning characteristics," the relation of mental ability or socio-psychological correlates to adult learning and participation. They are much less likely to examine those areas we have dubbed "adult education as a profession."

This bulk of research executed outside the "core" of the field illustrates again our dependence on knowledge from a host of related disciplines and the many practical opportunities continuing education problems present for research significant to these other fields. We speculate that the processes drawing these out-riders to do research in adult education are quite simple. Researchers whose basic concern is with some particular group of adults come to see the importance of learning to that group; others, concerned with substantive areas, recognize the necessity of teaching the subject to

adults; and, increasingly, professional workers in all fields sense the importance of continuing education in their own professions. Thus, at least for a time, these researchers engage themselves with problems central to our interests in adult education. Their contributions, bringing new perspectives from other disciplines, are a chief source of growing depth and scope in adult education research.

WHAT ARE THE PRODUCTIVE INSTITUTIONS IN ADULT EDUCATION DISSERTATION RESEARCH?

Though 83 universities are represented in this compilation of 505 dissertations, seven of them accounted for 267 or 52.87% of all studies, with each producing more than twenty dissertations during the five-year period. We have labelled this group of seven institutions, "Group I." Five of these are large land-grant institutions with extensive university and cooperative extension programs and serve large urban areas; the other two share the second characteristic.

Five more universities (Group II) produced from ten to nineteen dissertations each during the period, totalling 72 or 14.26% of all dissertations.

Eight additional universities (Group III) produced five to nine studies each, an average of about one or two per year. Together they contributed 50 studies, 9.90%.

The 63 other universities represented produced less than five studies each during the five year period, totalling 116 or 22.97%.

There is very clearly a small number of dominant productive institutions in the period from 1963 to 1967. The twenty universities in Groups I, II, and III are 24.10% of the institutions represented in the compilation, but they accounted for 389 studies or 77.03% of all during the five-year period. They tend to be large, urban or extension-oriented universities, most of them long active in adult education. They are the "leaders" we would all quickly mention in adult education research and graduate training. The graduates of these twenty universities are the backbone of the pitifully small cadre of professional workers who plan and guide the education of millions of American adults.

WHAT METHODS ARE MOST USED IN ADULT EDUCATION DISSERTATION RESEARCH?

We prepared a "methodological index" showing under each subject heading in the compilation the item numbers of studies done by each of four methods: experimental; descriptive; historical; methodological. We made small statistical studies to detect trends in the research methods used throughout the five-year period and to see if methods differed significantly between work supervised by the Commission of Professors and the others, or between the most and least productive universities. In assigning the studies to categories, the compilers have relied upon research definitions by Fred Kerlinger¹ and George Mouly.²

Experimental designs, A, involve the use of control and experimental groups and the successful exclusion of factors which will contaminate the results. Kerlinger identifies three kinds of experiments: laboratory, field, and field study. The first tries to find relationships under pure and uncontaminated conditions, to test predictions derived from theory and other research, and to refine theories and hypotheses and help build theoretical systems. The second calls for a realistic situation in which one or more variables are manipulated under carefully controlled conditions. The third aims at discovering the relations and interactions among sociological, psychological, and educational variables in a real social structure; they are ex post facto studies.

The second division, B, is descriptive studies which Van Dalen classifies under three arbitrary headings: survey, interrelationships, and developmental studies. George Mouly states that survey and descriptive studies are the same type united under the common purpose of establishing the status of the phenomenon under investigation. Fred Kerlinger speaks of the survey method as one which examines large and small populations by selecting and studying samples chosen from them to discover relative incidence, distribution, and interrelations of sociological and psychological variables. These are often sample surveys. The aim is to assess the characteristics of whole populations of people.

Although the approach and techniques can be used on any set of objects that can be well-defined, survey research focuses on people, the vital facts of people, and their beliefs, opinions, attitudes, motivations, and behavior.³

The case studies and the only philosophical study are included in this section.

Based on Kerlinger, C, historical research, is concerned with the "critical investigation of events, developments, and experiences of the past, the careful weighing of evidence of the validity of sources of information on the past, and the interpretation of the weighed evidence." The use of primary sources is an essential factor. There are about five more studies which could no doubt have been categorized as historical but there was insufficient evidence of the use of primary sources and/or there was the apparent overweighting of secondary sources.

Category D, methodological research, implies "controlled investigation of the theoretical and applied aspects of measurement, mathematics and statistics, and ways of obtaining and analyzing data."

TABLE II
METHODS USED IN ADULT EDUCATION
DOCTORAL STUDIES COMPLETED YEARLY (1963 - 1967)

METHOD	GROUP	63	64	65	66	67	TOTAL
Experimental	Commission	3	8	14	7	13	45
	Other	6	9	9	11	17	52
Descriptive	Commission	33	36	45	30	36	185
	Other	24	18	25	35	70	172
Historical	Commission	4	2	6	4	1	17
	Other	6	1	2	2	6	17
Methodological	Commission	3	2	3	2	0	10
	Other	2	1	1	2	1	7
	TOTAL	86	77	105	93	144	505

In 1959 Edmund Brunner, overviewing research in non-vocational adult education, stated that the majority of the studies were descriptive. A review of the doctoral theses from 1963 through 1967 presents a more varied picture. Yet many of the studies are still classified as descriptive. Given the sprawl of adult education across almost every major institution of American life and its constant penetration to new audiences in new programs by new methods, research done by individuals working largely with their own resources is likely to be of this type. Overwhelmingly, these are "surveys" of the characteristics, participation patterns, attitudes, or educational needs of various clientele groups; of the programs or curricula available in various agencies or locations; of use of various methods; of administrative practices; etc. Many of these studies use national samples; most of them are rigorous enough in execution that valid generalizations can be made from them. Sustained information analysis effort plus some boldness in extrapolating from these exploratory studies would yield a large fall-out of useful information.

There appears to be a small but steady increase in experimental studies during this period. Historical and methodological studies remain at a consistently low level.

No drastic contrasts exist between the methods typically used in the Commission of Professors group and all others. Volume of production in the Commission group was fairly stable, except for a large production in 1965. The sharp increase in 1967 was almost entirely accounted for by descriptive studies done by "other" groups, the spreading of this exploratory work to new areas.

Do the research methods preferred in the most productive institutions differ from those prevailing in the least productive? It is apparent from the comparisons in Table III that there is no significant difference. The impact of the most productive universities, especially the 12 in Groups I and II is largely due to the volume of their work rather than to concentration on some particular research method.

TABLE III

PERCENTAGE OF STUDIES DONE BY PRODUCTIVITY GROUPS (1963 - 1967)

GROUPS	TOTAL NUMBER DONE BY GROUP	PERCENTAGE OF ALL INSTITUTIONS	% OF TOTAL STUDIES DONE IN ALL INSTITUTIONS	RESEARCH METHODS	% OF TOTAL STUDIES DONE BY EACH METHOD
GROUP I 20 or more studies (7 univer- sities)	267	8.44	52.87	Experimental Descriptive Historical Method- ological	54.34 55.67 35.30 52.94
GROUP II 10 to 19 studies (5 univer- sities)	72	6.02	14.26	Experimental Descriptive Historical Method- ological	13.17 14.43 23.53 17.65
GROUP III 5 to 9 studies (8 univer- sities)	50	9.64	9.90	Experimental Descriptive Historical Method- ological	10.64 9.29 5.88 5.88
GROUP IV 4 or less studies (63 univer- sities)	116	75.90	22.97	Experimental Descriptive Historical Method- ological	21.85 20.61 35.29 23.53
TOTAL	505	100	100		

SOME IMPRESSIONISTIC COMMENTARY

We offer some gratuitous commentary on the general course of adult education degree research, based on no evidence other than the documentalist's close observation of the flow of these studies through the ERIC Clearinghouse on Adult Education in recent years.

Quality. We have an unmistakeable impression of improved quality over the years, not only in the rigor of research procedures but also in the significance of the problems researched. Particularly, we feel that this improvement has extended down to the Masters Degree research. ERIC/AE coverage of Masters' theses and papers is sporadic and highly dependent on submission of copies by the students or their professors. From the generous sample we do see, however, the impression of improved quality and volume is quite definite and we expect that this research training of large numbers accounts, in part, for the great increase in recent years of well contrived action research reports emanating from research and development projects out in the field.

Significance. While number and quality of dissertations have increased, the scope and urgency of adult education problems have pyramided at exponential rate. These research projects by individuals, useful as they may be, can never be more than a minor part of the large-scale, coordinated research and development campaigns required to effect the radical improvement in adult education practice required to cope with the engulfing educational needs of American adults.

Lack of use. The information and tested knowledge in the dissertations is not getting out to those who need to know, a general lament heard in every field. We are dismayed at how few of these studies are reported in abbreviated form in journal articles. The need for increased "information analysis" activity has been mentioned. Some improvement has been stimulated by the Adult Education Research Conference (formerly the National Seminar on Adult Education Research). We encourage the practice in some universities of preparing substantial digests of each dissertation project. These ten to twenty page digests can be entered into the ERIC system and will serve the purposes of 95% of the potential thesis users just as well, often better, than the full study. There is a growing, altogether deplorable, tendency to copyright dissertations. Copyright implies an obligation to make the material effectively available, which few, if any, of these writers have any intention of doing. Otherwise, it impedes information flow and annoys documentalists.

FOOTNOTES

¹Fred N. Kerlinger, Foundations of Behavioral Research: Educational and Psychological Inquiry (New York: Holt, Rinehart and Winston, Inc., 1967).

²George J. Mouly, The Science of Educational Research (New York: American Book Company, 1963).

³Kerlinger, op.cit., p394.

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Mouly, George J. The Science of Educational Research. New York: American Book Company, 1963.

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ABSTRACTS

0100 PHILOSOPHY, GENERAL OBJECTIVES

- *1 THE USE OF WHITEHEADIAN PRINCIPLES IN UNIVERSITY ADULT EDUCATION. Marx, Lucy Ann. Chicago Univ., 248p., 65.

This study examines the philosophy of Alfred North Whitehead to determine his theory of value and apply it to the principles, objectives and positions of university adult education. Whitehead's value criteria are applied to the two major statements on policy of university adult education, which the writer feels are inadequate: the National University Education Association position paper and the Scope Report of the Cooperative Extension Service. Besides finding these written positions deficient, the author views the current approaches to program development in university adult education--the community approach and the individual goal approach--not only incomplete, but insufficient in setting forth aims of adult education, since neither has a specific and unambiguous stance toward goals and objectives. It is felt that one of the most important contributions Whitehead can make to the field of university adult education is to offer a philosophical framework that encompasses both positions. Whitehead's educational aims are built around his concern for the individual, yet parallel to this individualistic emphasis is his recognition of man's essential involvement in his universe or community. Both views are expressed in his doctrine of the nature of man as an individual in the midst of the unity of the universe.

See also: SECTION 0350 STUDIES AND PLANNING - NATIONAL LEVEL: Item 3 Ben Franklin's views on education; 486 Anglican Church of Canada; 462 objectives in public school adult education; 394 literature review on liberal adult education; 123 adult education philosophy in ETV; 234 Cooperative Extension Service to lower socioeconomic groups

0150 LEGISLATION

See: SECTION 0175 FINANCE; 0350 STUDIES AND PLANNING - NATIONAL LEVEL: Item 471 influence of federal legislation on Michigan public school adult education; 279 agency roles in Title I, Higher Education Act; 497 role of Canadian provincial governments in adult education; 44 Servicemen's Readjustment Act of 1944.

0175 FINANCE

- *2 THE RELATIONSHIP OF ADULT EDUCATION PROGRAM DEVELOPMENT IN MICHIGAN TO STATE FISCAL POLICY. Anttonen, Elmer Soini. Michigan State Univ., 67-1,595, MF \$3.00, HC \$8.60, Ed.D. thesis, 186p., 67.

This study dealt with the participation of the public school districts of Michigan in the conduct of adult education programs, and with changes since the discontinuation of state financial aid to these programs in 1959. Data were drawn from the records of operation of participating school districts and from questionnaire responses by superintendents of both participating and nonparticipating school districts relative to their concerns for adult education within their districts. Public school adult education enrollments increased sharply during the period of state financial aid. Since the discontinuation of this aid, enrollments have fluctuated and decreased, with a sharp decline in 1964. Program supervision was being done by personnel devoting less than 1/4 of their time to it. Programs were financed mainly by student fees; local public school districts furnished 30% of total program funds. Adult education programs in Michigan have never served over 5.2% of the adult population. Over 72% of all courses and 70% of all enrollments were in urban districts with populations of 25,000 or more. Sixty percent of the cities under 25,000 offered no adult education programs; 11% of rural fourth class districts conducted such programs.

See also: SECTION 0150 LEGISLATION; 0350 STUDIES AND PLANNING - NATIONAL LEVEL

0250 STUDIES AND PLANNING - LOCAL LEVEL

See: Item 38 educational interests of high school drop-outs in Sioux City; 491 participants in Mount Lebanon, Pennsylvania; 465 socioeconomic status and participation in Baltimore; 358 programs for clerical workers in Boston; 474 immigrant education in New York City, 1898-1914; 466 effect of consolidating school districts; 33 design for needs survey in urban area; 37 needs in declining and non-declining urban areas; 40 classification of objectives for study of community needs; 293 county coordination of community development in Indonesia

0300 STUDIES AND PLANNING - STATE AND REGIONAL LEVEL

See: Item 395 Lyceum movement in New England; 203 migration of youth in Nebraska; 147 Senior Center in Ohio; 213 survey of older adults in Wyoming; 321 continuing education of Nebraska lawyers; 314 in-service teacher training in Louisiana colleges; 324 state employee development in Pennsylvania; 348 manpower training programs in Alabama; 360 post-secondary distributive education in Ohio; 365 custodial training in Indiana school systems; 329 electronic training in Iowa; 345 vocational education needs of South Dakota youth; 341 Wisconsin apprenticeship programs; 380 Oklahoma home demonstration programs; 372 agricultural agents in New York state; 39 migration in North Carolina; community college adult programs in Pennsylvania 282, Michigan 457 and 456, Washington 458, New York 459 and 283; public school programs in Colorado 267, Florida 469, Michigan 471 and 2, Nebraska 468, Oklahoma 470, Washington 23; 280 Title I in Tennessee; 272 extension credit courses in North Carolina

0350 STUDIES AND PLANNING - NATIONAL LEVEL

See: SECTION 0100 PHILOSOPHY, GENERAL OBJECTIVES; Item 494 history of public library; 407 cultural services in community colleges; 479 history of non-military training in armed forces; 475 practice in employment of retired military personnel; 461 adult basic education in public schools; 460 junior college non-credit programs; 406 music in public school programs; 266 adult high schools; 118 use of feature film series; 434 history of university extension in U.S. with application to Turkey; 57 administration of continuing education centers; 445 university extension, 1862-1914; 440 university off-campus centers; 135 staffing needs in Cooperative Extension; 176 teachers in private trade schools; 347 evaluation of retraining programs for unemployed; 410 history of methods and content of nutritional education; 333 programs for sales executives; 335 programs for accountants; 297 industrial programs for engineers and scientists; 120 history of ETV; 124 national organizations in ETV; 125 leisure and television; 126 trends in television adult education; 184 seminary courses for adult leaders; 409 Protestant policies on public education; 482 trends in interdenominational adult education; 483 history of Jewish adult education; 115 cooperative education in U.S. with application to Iran; 288 community development in India; 499 adult education in Puerto Rico; 500 history of adult education in Germany; 501 adult education in Germany; 502 People's Republic of China, 1950-1958; 503 political indoctrination in China; 504 fundamental education in Thailand; 54 community development in Pakistan.

0500 HISTORY

See: SECTION 0550 BIOGRAPHY; Item 432 growth model of adult education institutions; 493 residential adult education; 124 national organizations in ETV; 120 ETV; 129 listening groups; 264 relation of illiteracy to various social and economic factors; 263 UNESCO's concept of fundamental education; 262 education of immigrants in New York City; 238 mission Indians in Southern California; 410 nutrition programs; 323 employee training in Navy Department; 394 literature of liberal adult education; 395 Lyceum movement; 396 Great Books movement; 433 university extension in U.S.; 435 branches of University of Connecticut; 436 Rutgers Extension Division; 437 NYU Division of General Education; 446 Washington State Agricultural Service; 469 adult education in Florida; 470 Oklahoma; 474 immigrants in New York City schools, 1898-1914; 467 public school adult education in Louisiana; 478 Commission on Implications of Armed Forces Services Education Programs; 476 Army GED programs; 479 non-military education in armed forces; 482 trends in interdenominational adult education; 483 Jewish adult education; 489 concepts in church school curricula; 484 Hebrew adult education, 1800 B.C. to 220 A.D.; 490 adult education policies in Protestant churches; 488 adult church school literature in Methodist church; 494 library adult education; 502 China; 500, 501 Germany; 232 education of women in India; 499 Puerto Rico; 445 extension in land-grant universities, 1862-1914.

0550 BIOGRAPHY

- *3 BENJAMIN FRANKLIN AND HIS VIEWS AND OPINIONS ON EDUCATION. Powers, Thomas Joseph. Michigan State Univ., 66-6161, MF \$3.00, HC \$6.00, Ed.D. thesis, 121p., 65.

The central purpose of the study was to describe the opinions and activities of Benjamin Franklin in the area of education. Most of the research pertains to that portion of his life from 1727 through 1790. Much of his life and career centered on the Junto Club and the American Philosophical Society, which he founded and led. A brief summation is given of his life, his views on self-education, his attitude toward the need to provide a practical education for the people of Philadelphia, and his efforts to help establish an academy centered around an English education rather than the classics. Also presented are some of Franklin's views on the education of the orphans in Philadelphia as well as his thinking on Negro slavery.

- *4 ADAMANTIOS KORAI: HIS CONTRIBUTIONS TO THE THEORY AND PRACTICE OF ADULT EDUCATION AS AN INSTRUMENT OF SOCIAL-CULTURAL CHANGE. Moissides, George L. . Boston Univ., Ed.D. thesis, 206 p., 67.

The purpose of this dissertation was to search out and identify the contributions of Adamantios Korais to the theory and practice of adult education as an instrument of socio-cultural change. The method used was a study of the life and work of Korais. The conclusions were: Korais conceived his efforts as educational; he tackled the problem of communication through a philosophy of a modern Greek language that was truly common and literary and, at the same time, true to its ancestry; his correspondence moved leaders and the common people; he handled the problem of illiteracy; he formed a band of disciples to carry out his ideas of reform; he contributed to the field of education for democratic government; he advocated the church as a leader in cultural change, as well as a periodic revision of the constitution; he wanted adults to be allowed to attend class in the gymnasia together with regular students; and he suggested officially financed further education abroad for students who undertake to return to serve their countries. Several appendixes included samples of his writings and correspondence, as well as, a bibliography.

- 5 AMANDA LABARCA H., EDUCATOR TO THE WOMEN OF CHILE: THE WORK AND WRITINGS OF AMANDA LABARCA H. IN THE FIELD OF EDUCATION IN CHILE; THEIR VALUE IN THE PROGRESS OF EDUCATION IN CHILE. Paul, Catherine Manny. New York Univ., 67-11,120, MF \$3.00, HC \$9.45, 210p., 67.

This thesis reviews the life of Amanda Labarca, and gives an account and criticism of her educational work and writings. Questionnaires and interviews, works on the social, economic, and cultural development of

Chile, and other sources were used. In her educational philosophy she can be classified as a positivist, integralist, and scientific humanist. Her contributions include her primary school textbooks; propagation of the educational philosophy and work of John Dewey and his colleagues; creation of the Seasonal Schools, which helped raise the national cultural level, especially among women; arousal of citizen interests in and demand for needed educational reforms; the Experimental School and its influence on secondary education; successes in women's rights and welfare (probably her foremost achievement); the impact of her association with the University of Chile; and service rendered to the Chilean government and the United Nations. Her "History of Education in Chile" is generally considered her most important book on education. In 1963 she was made an Academic Member of the Faculty of the University of Chile.

See also: SECTION 0550 HISTORY: Item 413 Esther Middlewood, adult education in mental health

1100 ADULT LEARNING CHARACTERISTICS

1120 MENTAL, PERCEPTUAL ABILITY

- 6 A STATISTICAL COMPARISON OF THE WECHSLER INTELLIGENCE SCALE FOR CHILDREN AND THE WECHSLER ADULT INTELLIGENCE SCALE. Green, Harry Bruce. Virginia Univ., 66-3187, MF \$3.00, HC \$3.80, 69p., 65

Using a normally distributed American population, this study tested the statistical comparability of the Wechsler Intelligence Scale for Children (WISC) and the Wechsler Adult Intelligence Scale (WAIS). Fifty high school boys and girls aged 15 years, eight months to 15 years 11 months were first individually given the WISC. Four months later, when all subjects had reached age 16, they were individually given the WAIS. Discrepancy scores (standard deviations), correlation coefficients, and tests of significance of differences between means and between standard deviations, were used to judge the equivalency of Verbal Scale, Performance Scale, and Full Scale intelligence quotients (IQs) for the two tests. Although significant differences emerged between means for WISC and WAIS Performance Scale and Full Scale IQs, and although standard deviations for Verbal Performance and Full Scale IQs differed significantly between the two, the high correlation between the WISC and WAIS scales and the low standard deviations seem to verify the equivalency of the WISC and the WAIS as measures of mental ability.

- 7 A NINETEEN-YEAR FOLLOW-UP STUDY OF GOOD, AVERAGE, AND POOR READERS IN THE FIFTH AND SIXTH GRADES. Howden, Mary Evalyn. Oregon Univ., 68-9998, MF \$3.00, HC \$9.70, 211p., 67.

This study described adult reading skills, reading habits, and socioeconomic adjustments of persons known to be good, average, or poor readers in grades 5 and 6; and investigated relationships among adult reading

characteristics, parental and adult socioeconomic adjustment, childhood reading achievement and academic aptitude, and parental reading habits. Subjects were 57 persons who had been tested on reading achievement and academic aptitude in a 1948 research study. They were retested with the Gates Reading Survey, and interviewed as to educational and occupational history, amount of reading required by job, recreational reading habits, and participation in community affairs. These were some of the findings: (1) current reading scores correlated significantly with adult reading behavior and with childhood reading and Stanford-Binet intelligence scores; (2) the adult reading skills and behavior of those who had been average readers were intermediate, overlapping those of good and poor readers; (3) except for one poor reader with above average Stanford-Binet scores, those who were poor or deviant readers in childhood had adult reading scores below those of good childhood readers.

- *8 AN INVESTIGATION OF KEY-TONE MATCHING WITH CHILDREN AND ADULTS. Maltzman, Edward. Boston Univ., 65-6544, MF \$3.00, HC \$4.00, Ed.D. thesis, 73p., 64.

A musical task involving pitch discrimination was developed and taught to children aged four to 11 and adults aged 24-78. Individually presented tones served as stimuli for selecting keys for tone-matching responses. Included were an exploratory phase, in which sequences of material were manipulated and performance investigated, and the control experiment, in which reinforcing stimuli were used. Major "pre-solution" behavior patterns were affected by sequences of material and stimuli. Data also provided evidence of the systematic nature of such performance, and that relationships between sequences of materials and patterns of response can be experimentally controlled. In the control experiment, reinforcement procedures were tested on a sequence of material developed in the earlier phase; data revealed improvement in 13 of the 14 children and 10 of the 15 adults. Procedures in which subjects heard correct, but not incorrect, tones produced more learning than procedures in which both were heard; and inclusion of a red light produced more learning than use of a tone alone.

See also: SECTION 1160 SOCIAL, PSYCHOLOGICAL FACTORS; 1300 PARTICIPATION PATTERNS OF ADULTS; Item 443 achievement of college day and evening students; 430 memory span in foreign students in college English classes; 216 effects of skill learning in youth on re-learning in maturity and old age; 253 Negro urban illiterates; 74 interaction of intelligence with differentially structured learning materials; 16 information processing capacity related to age.

1160 SOCIAL, PSYCHOLOGICAL FACTORS

- *9 THE RELATIONSHIP OF SELECTED PERSONALITY NEEDS TO PARTICIPATION, DROP-OUT AND ACHIEVEMENT AMONG ADULT LEARNERS. Scharles, Henry G., Jr. Florida State Univ., 67-5527, MF \$3.00, HC \$6.00, 124p., 66.

To relate personality needs to dropout and achievement among adult learners, a sample of 90 males and 50 females was randomly drawn from the 600 registrants in the Hillsborough County, Florida, Adult Evening High School during the first week of classes. The Edwards Personal Preference Schedule was administered to the sample, and the data was tested by means of the chi square test. Among differences between the sample and norm groups were the sample groups' higher need for exhibition, intraception, and abasement, and lower need for consistency. Male nondropouts differed from the dropout group with a higher affiliation need and lower autonomy need for achievement. The male high achievers were higher than low achievers in their need for exhibition and succorance, but lower in their need for achievement, deference, intraception, dominance, and heterosexuality, while the female high achievers differed from low achievers in a high need for change and lower need for abasement.

- 10 SELF-CONCEPT METADIMENSIONS AND OCCUPATIONAL BEHAVIOR IN YOUNG ADULTHOOD: A CONTENT ANALYSIS OF LONGITUDINAL DATA. Bothwell, James Lowe. Columbia Univ., 67-14,027, MF \$3.00, HC \$8.40, 181p., 67.

To explore the independence, reliability, and validity of metadimensional measures, 112 boys were interviewed at the 9th and 12th grade levels to obtain self-concept data for an analysis of nine structural, self-concept metadimensions, and other characteristics of self-referent material. Self-referent sentences, defined as those indicative of positive or negative evaluations, were written on cards for later analysis. Using rating scales, judges evaluated the sentences to obtain assessments of the metadimensions of clarity, self-esteem, and abstraction. The metadimension assessments were correlated with intelligence and other characteristics assessed at both the 9th and 12th grades, as well as with 40 indices of occupational and other behavior obtained when the subjects were about 25 years of age. Of the nine measures, six (clarity, self-esteem, abstraction, harmony, stability, idiosyncrasy) appeared relatively independent. The relationships between the 9th grade metadimensions and those derived from the 12th grade protocols were low, with a Pearson's r below .30 in all but one instance--Scope, where the r was .37. (Included in the appendix are: the characteristics at the 9th and 12th grades, description of the variables used, the procedure for grouping self-references having similar meaning, and a bibliography.)

- *11 ADULT ASPIRATIONS AND ADULT EDUCATION. Davis, Josephine Hogevo11. California Univ., 65-13,087, MF \$3.00, HC \$9.45, Ed.D. thesis, 207p., 65.

A study was made of aspirations of lower, middle, and upper socioeconomic level adults in Los Angeles, perceived difficulties in realizing aspirations, and kinds of opportunities desired to overcome these difficulties. Related literature was reviewed, and 90 adults, classified by age, sex, and socioeconomic status, were interviewed. Aspirations were mainly concerned with family, neighborhood, economic, and job opportunities. Major deterrents were personal limitations, restricted socioeconomic conditions, and lack of education. Difficulties most often identified were personal,

especially among women. Over half the respondents expressed a desire for educational and economic opportunities. Desire for education was mentioned least often at the lower and middle socioeconomic levels; yet these groups recognized that lack of education was the major obstacle to their success in life. The lower group rated economic rather than educational problems as their chief difficulty. Findings showed that more middle and upper than lower socioeconomic group members appreciate education and use it to help fulfill aspirations, that the latter realize that lack of education poses difficulties, and that this group needs further education.

- *12 THE MEASUREMENT OF EDUCATIVE BEHAVIOR AND ITS RELATIONSHIP TO THE LEISURE SATISFACTIONS OF COLLEGE ALUMNI. Ingham, Roy John. Chicago Univ., 142p., 63.

The Leisure Activities Index was developed to measure educative behavior and was used to study the relationship between leisure satisfaction of adults and the extent to which they engaged in educative behavior. Five different groups established norms for the index: college graduates, noncredit university students, part-time credit students, high school teachers, and full-time graduate students. Information on educative and leisure satisfactions of autonomy, creativity-talent, and leisure complementary to work was collected from 682 alumni by mailed questionnaires. It was found that alumni who majored in liberal arts or had graduate degrees engaged in educative behavior more than those who majored in preprofessional curriculums or received only bachelor's degrees. Implications for education of adults and youth are made. The appendixes include the leisure activity check sheet, interview form, and attitude inventory.

- 13 RELATION BETWEEN PREFERENCE FOR DELAYED GRATIFICATION AND BEHAVIOR IN AN INDUSTRIAL TRAINING PROGRAM. Cochran, George Clark. Stanford Univ., 67-1,081, MF \$3.00, HC \$4.20, Ed.D. thesis, 78p., 67.

Relationships were studied between delayed gratification pattern (DGP) and desirable behaviors (completion, attendance, punctuality) in a Manpower Training and Development Training Program in aircraft assembly. Subjects were 594 unemployed trainees, most aged 18-26. Two questions and a DGP index were used. Trainees who dropped out were to report the reason(s). Dropouts who complied were FGC (For Good Cause); those who did not were NFGC (Not For Good Cause). Three categories of completers were established: those absent and/or tardy at least once; those neither absent nor tardy, and high completers (upper 10%) neither absent nor tardy. Findings included the following: (1) DGP scores were significantly related to responses to the two questions, FGC versus NFGC status, and NFGC dropouts versus completers; (2) completers who were neither absent nor tardy averaged higher on DGP than those absent and/or tardy; (3) high completers averaged slightly lower on DGP than the total of completers who were neither absent nor tardy; (4) when questionnaires were stratified by question responses, averaged DGP scores ranged from lower to higher according to performance, with significant differences between NFGC dropouts and all higher performance levels.

See also: SECTION 1120 MENTAL, PERCEPTUAL ABILITY; 1300 PARTICIPATION PATTERNS OF ADULTS: Item 325 behavior styles of beginning and graduating students in officer candidate school; 336 effects of participation training on university supervisors; 346 psycho-social characteristics of poor potential vocational secondary school trainees; 343 relation of home environment to employment of husbands; 362 relation of various factors to achievement in shorthand classes; 356 personal and social adjustment of high school dropouts; 212 work values and satisfaction with retirement; 215 role and self theory related to adjustment in retirement; 237 dogmatism in Spanish American young adults; 246 psycho-social factors in tuberculosis control; 204 ethics of young adults; 209 personal, social factors related to interests of 4-H youth; 249 personality of prison inmates; 222 social roles of middle-aged women; 230 achievement motive in women; 229 identity problems of women related to sex roles; 17 interests of young and middle aged adults; 96 ego stage and group participation; 62 conformity, dogmatism in industrial workers; 91 effects of participation training on closed mindedness, anxiety and self concept; 53 self dimensions and community leadership

1200 AGE DIFFERENCES

- 14 THE EFFECT OF AGING ON TACTUAL-MOTOR AND VISUAL-MOTOR PERFORMANCE. Berg, Werner. Tennessee Univ.; 64-11,140, MF \$2.75, HC \$4.20, 76p., 64.

This study was to determine whether differential decline of response efficiency in the two modalities (tactual and visual) occurs as a function of the aging process. Seventy-five adults with an age range of 31-80 years were given a specially constructed tactual version of the Bender-Visual-Motor-Gestalt test in addition to the standard, visually administered version. Although subjects showed a systematic loss of efficiency as a function of age, in both modalities, differential decline was not demonstrated. Age was found to correlate negatively and significantly with both speech and quality of Bender-Gestalt performance. In all age groups those subjects with more than eighth grade education performed better than their age mates with eight or less years of education.

- 15 VISUAL DISCRIMINATION LEARNING IN ELDERLY SUBJECTS. Crovitz, Elaine Koblin. Duke Univ., 11,677, MF \$2.75, HC \$4.20, 78p., 64.

This study investigated approaches to discrimination learning used by young and aged subjects; rates of discrimination learning for both; and whether training in verbalization aids discrimination performance by aged subjects. In one experiment, 26 aged men and 32 young men were given an original discrimination problem and a reversal shift (backward learning). After learning, each subject was interviewed to relate learning measures to subjects' verbal reports of their approaches to learning. In another experiment, 26 aged men were matched for intelligence and age and randomly assigned to training or no training. The task from the first experiment

was used but without the reverse shift. Possible effects of brain damage were also checked. Aged subjects learned more slowly, and correctly verbalized responses less often, than young subjects; while subjects who appropriately verbalized the correct basis for discrimination and sorting learned faster than others. Discrimination learning by aged subjects did not differ significantly from that of young subjects who verbalized correctly. Brain damage testing did not significantly differentiate aged learners from nonlearners in the untrained group, but abnormality of EEG was characteristic of the aged learners.

- *16 THE RELATIONSHIP BETWEEN AGE AND INFORMATION PROCESSING CAPACITY AND AGE AND CHANNEL CAPACITY OF ADULTS. Carpenter, William Lester. Florida State Univ., 68-7787, MF \$3.00, HC \$7.00, Ed.D. thesis, 149p., 67.

This study sought to determine if there is a change in information processing and channel capacity as the human organism grows older, and if this relationship is altered with a change in stimulus complexity and dimensionality of the stimulus presented. With the human organism considered as a communication system, the use of absolute judgments to measure judgmental discrimination accuracy was extended to measure the subjects over a 45-year age range and under simulated classroom conditions. Using visual stimuli, 74 subjects judged size of dark squares on a light background in three tests and the location of the placement of a dot in a grid pattern in two tests. As predicted, performance declined as age increased. In three of the five tests this decline was statistically significant (.05 level); in the other two tests the decline was in the predicted direction. Since the least complex tests were presented first, it was assumed that this high-anxiety state masked the performance of the older subjects in the earlier tests, but as this state faded out older subjects reached their peak performance which was very little if any below that of the younger subjects. (A bibliography is included.)

- *17 CHANGE OF INTEREST BETWEEN YOUNG ADULTHOOD AND EARLY MIDDLE AGE AMONG PARTICIPANTS IN ADULT EDUCATION PROGRAMS. Phifer, Bryan M. Chicago Univ., 243p., 64.

An attempt is made to determine change in certain personality traits of participants in adult education programs between young adulthood and early middle age, and to test the validity of social science theory and developmental tasks concepts concerning the relative interests of young and early middle-age adults in the physical and cultural areas of life. Data from 646 respondents between the ages 25 and 45 verified Jung's theory and development tasks concepts that young adults are more interested in the physical area of life (family, home, job interests) than in the cultural area (civic, cultural and liberal education interests). Data did not verify Jung's theory and developmental tasks concept that early middle-age adults are more interested in cultural areas of life than young adults. Level of cultural interests rose significantly with level of education, while level of physical interests decreased significantly with level of education. Women were significantly more interested than men in the cultural area.

See also: SECTION 1120 MENTAL, PERCEPTUAL ABILITY; 1160 SOCIAL, PERSONALITY FACTORS; 1300 PARTICIPATION PATTERNS OF ADULTS; 4635 OLDER ADULTS; Item 424 relation of re-creation to ego development theory

1300 PARTICIPATION PATTERNS OF ADULTS

- 18 THE NATURE AND PATTERN OF PARTICIPATION IN ADULT EDUCATION ACTIVITIES. Litchfield, Ann. Chicago Univ., 316p., 65

This study investigates the educational participation of adults from the learner's viewpoint. Purposes were to develop a technique to determine the extent of adult participation; to apply the technique to determine the underlying structure among activities and patterns of participation; and to examine the relationship of selected demographic characteristics (social class, age, sex, family size, and religious affiliation) to patterns of participation. A "Leisure Activity Survey" (LAS) instrument was constructed, tested, and administered to 1,149 men and women. It obtained data about the nature and content of adult participation in 46 educational activities, and was scored for extent of participation. Principal component analysis was used to determine the structural nature of educational activity and profiles of participation. Among conclusions were that the LAS is a valid instrument to measure extent of adult participation in educational activities that the nature and content of the various activities can be empirically identified by a limited number of activity components, and that evidence does not support or reject the hypothesis that patterns of educational activity vary by demographic characteristics.

- *19 ADULT PARTICIPATION IN EDUCATIONAL ACTIVITIES. Boyle, William Joseph. Wisconsin Univ., 67-12,413, MF \$3.00, HC \$8.40, 184p., 67.

Part of a longitudinal project begun in Wisconsin in 1956, this study investigated the relationship of participation in educational activities by young male adults to present socioeconomic status and to personal and environmental factors measured while in high school. About half the respondents had participated in one or more educational activities during the previous year. High school intelligence, educational aspirations, present levels of education, and occupation were significantly related to the extent of participation; income levels, years in a given occupation, size of the high school attended, the high school curriculum pursued, and educational achievement in high school were less related. Over half the respondents expressed a goal orientation; which, combined with high participation in vocational subjects, indicates a high motivation among young male adults to improve their occupational status. Present occupation was the only independent variable significantly related to participation. Many of the learning oriented had planned on, and studied for, college.

- 20 LEISURE AND EDUCATION FOR LEISURE: A STUDY OF AN EMERGING PRIORITY. Kimball, Kenneth Robie. N.Y. State Univ., 68-5271, MF \$3.00, HC \$9.90, 220p., Ed.D. thesis, 67.

This study was done to ascertain indicators (if any) of leisure as an emergent social institution, the opinions of suburban adults on leisure, and their opinions about the role of the schools and other social institutions in preparing youth for leisure. A literature survey confirmed leisure as a growing social force. Survey respondents (185 heads of households in Albany County, New York) were largely married men with 12 or more years of education; 58% were in professional, managerial, clerical, or sales positions. Play activities were preferred by 57% to entertainment, making, or fulfillment activities. The group indicated that the home, school, and church, in that order, are assuming or should assume major roles in preparation for leisure. Respondents were divided on the statement that "education for leisure has become as important as education for work", with stronger reactions coming from those who disagreed with the statement. The home was found lacking in preparing youth for leisure, and intensified efforts by educative agencies were urged. Suggestions and cautions were developed which might serve as a guide for people concerned about education for leisure.

- *21 EDUCATIONAL PARTICIPATION AND OPENNESS TO NEW IDEAS. Averill, Thomas B. Chicago Univ., 224p., 64.

The study was concerned with the greater participation in educational activities by some people, and the willingness of some to attempt more innovations than others. Eight activity areas--magazine reading, book reading, class attendance, taking correspondence courses, conference and institute attendance, television viewing, discussion group participation--were chosen to represent a sample of activities that would reflect a person's educational life. Participation was measured by: (1) the amount of participation in each activity; (2) the overall amount of participation; (3) a qualitative bookreading score; and (4) a qualitative magazine reading score. The adoption of farm practices was the basis of openness to new ideas, and farmers were classified by four adopter categories. Data were obtained through a questionnaire and interviews. To examine the relationship among participation, book, and magazine scores, a matrix of interrelations was obtained. Magazine score was found to be correlated .9047 with participation score; book score, .4278 with quantitative participation and .5277 with magazine score. Analysis of variance was done on participation and magazine scores, and the differences among the means were found to be significant at the .001 level. Tukey's test for significant gap revealed that the difference between laggards and majority adopters for book score was not significant.

- *22 FACTORS AFFECTING ADULT PARTICIPATION IN EDUCATIONAL ACTIVITIES AND VOLUNTARY FORMAL ORGANIZATIONS. Douglass, Mohammed A. Wisconsin Univ., 65-9233, MF \$3.00, HC \$8.20, 177p., 65.

This study investigated adult participation in educational activities and voluntary formal organizations. A random sample of 532 adults were interviewed in 1962 in Columbia County, Wisconsin. The educational participation index was based on any or all of 15 activities; organizational participation was based on individual membership, number of officerships or committee memberships held, and frequency of attendance. Independent variables included age, sex, formal education, occupational status, marital and family status, income, residence, and religion. Major findings included the following: (1) males and females did not differ significantly on either educational or organizational participation; (2) female awareness of community problems was related to educational participation, while awareness by males was related to organizational participation; (3) youth leadership status was the chief influence on organizational participation, and, for both sexes, church attendance, income, education, and visiting patterns were also significant; (4) education was the main factor in educational participation, but youth leadership was also significant. Several other variables were significant with one sex only.

- 23 A SURVEY OF ADULT EDUCATION CLASSES IN THE STATE OF WASHINGTON. Armstrong, Leslie Harold. Washington State Univ., 65-11,530, MF \$3.00, HC \$9.25, Ed.D. thesis, 203p., 65.

Enrollment in 34 Washington State schools with 100 or more adult students was surveyed in 1961-62 with respect to principal types of courses, age, sex, region, occupation, program content, public school (day) enrollment, and basic reasons for study. Questionnaire respondents numbered 3,290 (an 84% usable response). These were among the findings: (1) improving one's general education, preparing for a better job, and increasing one's present job proficiency were the most important motives given; (2) adult education was of more interest to younger than older adults; (3) males predominated in larger centers; females, in middle-sized and small centers; (4) men tended toward industrial, and women toward cultural, courses; (5) younger adults predominated in industrial type courses, with older adults predominating in commercial, academic, and hobby or avocational courses; (6) homemakers (about 25% of the total) were the largest occupational group; (7) King County, the most populous area, was also the adult education hub. Washington State adult students, typically young, urban, and interested in self-improvement, will (along with increasing numbers of mature adults) swell the ranks of adult education during the 1970s and 1980s.

- *24 FACTORS RELATED TO THE PARTICIPATION OF SELECTED YOUNG ADULT MALES IN CONTINUING EDUCATION. Carson, Raymond P. Florida State Univ., 66-5443, MF \$3.00, HC \$9.00, Ed.D. thesis, 200p., 65.

The relationship between participation in continuing education by young adult males and certain educational, vocational, and sociopsychological factors was studied in rural communities in Florida. Data were collected by questionnaire when participants were sophomores in high school and again six years later. In phase one, their participation in continuing

and background factors were studied. The sample was separated into part time, full time and non participants. It was found that high participation was related to high mental ability and educational achievement, high school educated parents, and professional fathers. In phase two, the nature and extent of part time participation was analyzed. Mental ability was related to mother's education, educational and vocational aspiration, and achievement. Among conclusions were: socio-psychological factors were not good predictors of the type of education pursued, the armed forces provided the largest percentage of part-time education, and mental ability played a significant but not overwhelming role in motivation for continued education. Recommendations and implications are suggested.

- *25 A STUDY OF SELECTED HIGH AND LOW ACHIEVING UNIVERSITY GRADUATES ON SEVERAL FACTORS AND ATTITUDES RELATED TO POST-COLLEGE STATUS. Glass, Quentin Lee. Wyoming Univ., 133p., 67.

This study examined the relationship between high or low class rank at South Dakota State University and several postcollege criteria related to attitudes and status. Variables were background and demographic factors, educational and occupational factors and attitudes, and participation in civil and religious organizations. The study was further amplified by a look at high status (in terms of unusual postcollege achievement) in an elite group. Relationships which resulted in significant differences either between or within higher and lower achieving groups were residential patterns and changes, increase in socioeconomic status, age differences, undergraduate concentrations, amounts of graduate study, levels of income and occupation, increases in job satisfaction, and perception of their undergraduate education as important in either social development (lower group) or intellectual growth (higher group). High status graduates were significantly younger, more mobile, more interested in challenge and satisfaction from work, more positive toward their present positions, and, most important, had set career goals earlier, than the overall sample.

- 26 MOTIVATION AND FACTORS CHARACTERIZING ADULT LEARNERS ENROLLED IN EVENING COURSES AT DRAKE UNIVERSITY. Dugger, James Gordon. Iowa State Univ. of Science and Technology, 66-2986, MF \$3.00, HC \$6.00, 123p., 65.

This study examined personal and other characteristics of students enrolled in evening credit courses at Drake University, and investigated the relationship of academic success to motivation and such other factors as sex, age, income, previous college attendance, and academic achievement. Data on 1,567 students (fall semester 1964) were obtained from a questionnaire, student registration card, and the permanent record card. These were among the findings: (1) the majority of the adults were vocationally motivated, especially employed persons, those with incomes of \$6,000 and over, and men aged 20-49; (2) unemployed adults had sociocultural motives for attending evening classes; (3) grade point averages were slightly

higher for vocationally motivated adults (those preparing for career advancement or a job change) than for others. The findings on motivational changes with age have important implications for adult education methodology.

- *27 EDUCATIONAL ATTITUDES AND LEARNING ORIENTATIONS OF RURAL ADULTS IN SELECTED CULTURAL SETTINGS. Butterfield, Paul Gordon. Wisconsin Univ., 65-5113, MF \$2.95, HC \$10.35, 227p., 65.

This study sought to determine if rural adults vary in adult education participation, organizational participation, learning orientation, and attitudes toward selected educational practices, according to religious and cultural patterns and homogeneous (80% or more of like background), heterogeneous (under 80%), and changed localities (from homogeneous to heterogeneous during 1953-63). Heterogeneous locality adults were more positive than homogeneous toward elementary school practices and secondary and adult education programs. Homogeneous Danish Lutherans favored organizational participation more than those in heterogeneous or changed localities. Homogeneous German Catholics were more positive toward adult education than heterogeneous German Catholics. Homogeneous groups were less need-fulfillment oriented and the changed group was more learning oriented than the heterogeneous group. Changes in educational attitudes had not been great. Scores of the changed locality group tended to be intermediate. The homogeneous groups were more active in farm organizations; the changed locality group held more offices; homogeneous groups scored lower in school and civic participation.

- 28 THE UTILIZATION OF POSITIONAL LEADERS BY COMMUNITY MEMBERS IN A RURAL WISCONSIN COUNTY. Jahns, Irwin K. Wisconsin Univ., 192p., 67.

This study investigated the use of leaders in various agencies and professions by adults in a largely rural south central Wisconsin county. The study dealt with the extent to which these leaders, who provide information and service as a part of their professional responsibility, had been contacted, by whom, and for what reasons. Data were obtained from a representative sample of adults in the county under study. Over a third of the sample had contacted none of the positional leaders during the 3 years prior to the study. Nearly a third had contacted 1 or 2, and still another third, 3 or more. Factor analysis of reported contacts identified 5 factors, or problem areas, about which leaders were contacted--rural life education, professional consultation, family and youth education, local political orientation, and social welfare. Findings suggested that those who contacted positional leaders who clustered under any one factor were marked by unique personal, social, and attitudinal attributes. Likewise, those who utilized leaders from 3 or more, 1 or 2, or none of the problem areas, significantly differed from one another. Document includes 34 tables and 49 references.

See also: SECTION 1160 SOCIAL, PERSONALITY FACTORS; Item 317 factors related to success in NDEA counseling institutes; 299 factors related to participation in continuing education of engineers; 301 college achievement and industrial success; 465 socioeconomic status and participation in Baltimore; 464 acceptance of minors in adult classes; 451 views of agricultural extension service in California; 438 evening college students; 441 evening and off-campus students, Temple University; 416 participation of young homemakers in group learning; 419 homemakers in consumer education in low income urban area; 398 liberal education students, University of Oklahoma; 404 public school science programs; 397 liberal education discussion groups in Wyoming; 405 community cultural arts activities; 368 low income farmers; 381 women in home economics clubs; 380 home demonstration programs in Oklahoma; 201 rural young adults in vocational programs; 287 civil defense programs in Florida; 211 lifelong learning and adjustment in old age; 205 rural youth in voluntary organizations; 254 adult basic education; 276 factors related to success in college; 125 leisure and television; 200 Q-sort for measuring values in religious programs; 221 activity patterns of middle class, middle-aged women; 226 married women college students; 67 noncredit extension students; 107 conference participants; 20 education for leisure

1500 PROGRAM PLANNING AND ADMINISTRATION

1505 PROGRAM PLANNING PROCESSES

- *29 PROCESS GUIDELINES FOR ADULT EDUCATION PROGRAM DEVELOPMENT. Tye, Norwood Burl. Columbia Univ., 67-5549, MF \$3.60, HC \$12.60, Ed.D. thesis, 277p., 66.

Process guidelines for adult education program development were identified by means of a detailed search of selected literature. Definition of the program development process includes (1) selection of educational objectives, (2) selecting and organizing learning experiences to achieve objectives, and (3) evaluation. Publications since 1950 were selected based upon the criteria of general excellence, authority of the writer, pertinence, and timeliness. The four types of evidence used for support of guidelines in order of their value for the study were findings of research, statements of educational authorities, reports of experience, and untested opinions of authors. It was found that the three component parts of program development were interlocking parts of one whole process. The large number of guidelines identified in the study were hierarchically arranged under the six major headings of (1) selecting objectives, (2) relationship of objectives to learning experiences, (3) selecting and organizing learning experiences, (4) evaluation of the extent to which objectives have been achieved, (5) the relationship of selecting objectives to evaluation, and (6) the relationship of selecting and organizing learning experiences to evaluation.

- *30 PROPOSED GUIDE FOR ANALYZING EXTENSION YOUTH PROGRAM PLANNING PROCESSES. Russell, George Edwin. Wisconsin Univ., 64-9692, MF \$2.85, HC \$9.90, 217p., 64.

This study was made to formulate a guide for analyzing Extension youth program planning processes; to determine Extension agents' and key lay leaders' perceptions of the relative importance of elements in the guide and how fully these elements are being followed; to assess the relationship of background variables to perception of criteria; and to suggest changes and further research. Conclusions were these: (1) program planning concepts and theories from the literature can be formulated into a guide to planning processes; (2) criteria included in the guide are acceptable standards for analyzing planning processes; (3) dimensions included under the criteria are important elements thereof; (4) the Extension agents and lay leaders consider the criteria important in the program planning process but see dimensions of criteria as not being satisfactorily followed; (5) agents and lay leaders tend to agree on the importance of dimensions and on how well they are followed; (6) agents' perceptions are related to their positions and to program planning course work or lack thereof; and (7) dimensions are not equally applicable as elements of criteria.

- 31 A PLAN FOR IMPLEMENTING A PROGRAM OF CONTINUING ADULT EDUCATIONAL SERVICES. Dakin, William Robert. Arizona State Univ., 67-10,862, MF \$4.40, HC \$15.55, Ed.D. thesis, 342p., 67.

From the analysis of the literature and the opinions of a jury of experts in adult education, 14 basic steps for implementing a program of noncredit, informal, continuing adult educational services were derived. A local governing board, appointed as sponsoring agency, appoints a Director of Adult Education to administer the program, and a lay advisory committee. These officials develop a sound philosophy and a set of program objectives, establish operating policies and procedures, and determine individual and community needs and interests and plan programs to meet them. There must be adequate financing and facilities, qualified teachers and leaders and inservice training for them, and effective publicity and information about the program. The director should establish a complete plan of administrative procedures. A continuous evaluation of the staff, program, and participants must be provided.

- *32 A STUDY OF PARTICIPANT OBJECTIVES IN SELECTED MANAGEMENT INSTITUTE PROGRAMS. Draper, James Anson. Wisconsin Univ., 64-13,870, MF \$3.10, HC \$10.80, 237p., 64.

The purpose of this study was to examine the similarity in the perception of the objectives of adults not involved in cooperative program planning and the relationship between the participant's satisfaction and the degree to which his objective is shared by the others. Utilizing the Taxonomy of Educational Objectives, the Twenty-Seven Card Q-Sort, and the Satisfaction Scale, combined with the 27 Card Q-Sort, the researcher collected data from the attending supervisor, the immediate superior to the attending supervisor and a representative of the supervisor's employer and the program coordinator. Five null hypotheses dealing with the congruence of educational program objectives that the participating parties

in the program expressed were rejected; two null hypotheses dealing with the relationship between congruence of objectives and the attending supervisors' perception of satisfaction were accepted; and all respondents were found to put greater emphasis on the self-directed dimension of the taxonomy than on the other-directed dimension. It was concluded that, for this type of program, satisfaction of participants can be relatively high without involvement in cooperative program planning.

See also: SECTIONS 1510-1890; Item 331 management education in corporations; 296 model program in continuing education in the professions in Wyoming; 447 program planning concepts in agricultural extension; 439 establishment of a state college; 385 planning agricultural extension in Nigeria; 292 conceptual model for town meetings in Nigeria; 291 conceptual scheme for adult education in Nigeria; 142 program planning role of extension agents; 146 role of county agents in program planning; 150 state extension specialists role; 191 county extension chairmen; 59 guidelines for university residential conferences; 58 program planning process in residential centers

1510 ASSESSING EDUCATIONAL NEEDS

- *33 A DESIGN FOR A SELF-SURVEY OF ADULT EDUCATION NEEDS AND RESOURCES IN AN URBAN COMMUNITY. Brickman, Leonard. Columbia Univ., 65-10,027, MF \$3.00, HC \$8.00, Ed.D. thesis. 172p., 65.

This project designed a plan by which urban communities could find the needs and resources for their adult education programs. Three techniques were used: analysis of census statistics, a survey of advisory committees as to perceived needs and resources, and a questionnaire survey of adult education activities and sponsors in the Bronx. Statistical data revealed many educational, socioeconomic, and related problems. Recommendations to interested groups dealt with budgeting, institutions, cooperation, upgrading of educational levels, minority problems, facilities for elementary adult education, distribution of centers, problems of special age groups, cultural activities, adequate medical information, guidance and counseling, program evaluation, and use of unused resources. Basic suggestions were made: (1) to the community at large concerning the need for coordination of existing institutions, creation of a clearinghouse for adult education information, and establishment of a central planning agency for special problems of minority groups; (2) to adult educators for organizing, operating, coordinating, and evaluating similar studies.

- 34 A TYPOLOGY OF COMMUNITY LEADERSHIP. Preston, James Dene. Mississippi State Univ., 67-9208, MF \$3.00, HC \$9.00, 199p., 67.

This study suggested and evaluated four dimensions (scope of interest, degree of recognition, extent of organization, cohesiveness) of leadership structures; sought operational measures of each dimension; compared the overlap among three traditional approaches to identifying community leaders; and constructed a community leadership typology. Data used in the analysis came from community informants in two southern communities.

Interviews and newspaper searches were used to ascertain the most important community action programs. Leadership dimensions were operationally measured by using reputational, positional, and action analysis techniques. A statistically significant degree of overlap was revealed between methods of identifying leaders. In the typology, highly generalized leaders were those broadly involved in at least three interest areas; less generalized leaders were broadly involved in two interest areas; limited scope leaders were less broadly involved. Relatively small groupings of top leaders would have been identified regardless of approach; many leaders would have been identified only by all three methods or some combination of two methods; and after the top grouping in each community, leadership categories tended to taper off until relatively minor distinctions between "types" could be made.

- *35 PROJECTION OF INFORMAL EDUCATIONAL PROGRAMS THROUGH FORECASTING. Douglas, Leonard Carl. Cornell Univ., 66-11,012, MF \$3.00, HC \$7.80, Ed.D. thesis, 169p., 66.

The study defined and tested a model, based on pertinent Cooperative Extension Service literature, that was meant to project changes in present educational audiences well enough to predict educational needs, and to identify new audiences in the early stages, and to derive implications for the institution and its programs. Ninety-seven farm operators in Suffolk County, New York, were interviewed. Major findings included the following: (1) general population trends were not good indicators of definite educational programs; (2) population changes in clientele groups gave data on which to base educational programs; (3) in some situations, the predicted elimination or reduction of a group posed the immediate problem of shifting resources to other clientele groups; (4) a related problem was continuation of educational activities of acceptable quality to a dwindling audience; (5) forecasts made in testing the model tended to underestimate the actual change rate, but they were close enough to permit program planning for a group of reasonable size.

- 36 THE DEVELOPMENT AND PRE-TEST OF AN INSTRUMENT FOR ASSESSING THE STATUS OF SENIOR CITIZENS IN WYOMING AND SOME INVESTIGATIONS OF SAMPLING AND INTERVIEW TECHNIQUES. Pickett, Lloyd C. Wyoming Univ., 212p., 63.

This study was done to devise and perfect an interview schedule for surveying Wyoming older adults, pretest the instrument, and determine the most effective interview techniques. Measures of educational background, leisure activity, morale, physical health, and religiosity were included in the schedule. These were among the conclusions: (1) the use of contact persons prior to interviews contributed to interview success; (2) interview schedule items posed little threat to respondents; (3) certain items were easily misinterpreted; (4) many response categories were inadequate; (5) the sample source (property tax rolls) was not adequate itself; (6) casual dress, warm weather, and a suitable introduction are helpful in an interview situation; (7) interview length was somewhat too long but manageable.

- *37 SELF-PERCEIVED EDUCATIONAL NEEDS OF ADULTS IN A DECLINING COMMUNITY AND A NON-DECLINING COMMUNITY. Dobbs, Ralph Cecil. Indiana Univ., 65-14,035, MF \$3.00, HC \$9.00, Ed.D. thesis, 199p., 65.

Self-perceived educational needs of adults in a declining and a non-declining inner city community were studied, with a view toward planning educational programs to serve both communities. Home interviews were held with 100 randomly chosen respondents. The special interview schedule consisted of 36 questions on personal characteristics, aspirations, problems, interests, and needs. Several conclusions were reached: (1) despite statistically significant differences in the personal characteristics of the two groups, their expressed needs, problems, interests, and aspirations were quite similar; (2) the majority of adults in both groups considered their educational needs secondary to economic needs; (3) adult education programs dealing with economic development (for members of the declining community) and with personal economic needs (for the other group) would have the broadest appeal, at least initially; (4) adults in both communities would be receptive to an appropriate adult education program; (5) night is the most convenient time to hold adult classes; (6) vocational education activities should be considered, and ways sought to extend high school certification courses to adults; (7) literacy and fundamental education should be begun in the declining community.

- 38 A STUDY TO DETERMINE THE EDUCATIONAL INTERESTS OF ADULTS IN SIOUX CITY, IOWA, WHO DID NOT COMPLETE HIGH SCHOOL. Cox, Robert P. South Dakota Univ., 66-1876, MF \$3.00, HC \$8.80, Ed. D. thesis, 197p., 65.

A study was made to locate the adults in Sioux City, Iowa, who had not completed high school and to relate their educational interests to the programing of adult education activities. The population was identified through the June, 1964 school census procedures and consisted of 4,714 school dropouts between the ages of 21 and 64. Information was obtained through interviews. Women expressed less satisfaction with their jobs than did men, and both occupied their leisure time in active pursuits. Economic barriers and educational shortages were the major sources of difficulty encountered. The major motivation for adult education participation was to improve employment opportunities. The respondents under 40 were more willing to enroll in educational activities than were older respondents and showed a greater interest in basic elementary and secondary programs. The results indicate that regular school census procedures have definite potential for surveying various populations served by the Department of Adult Education of the Sioux City Public Schools.

- *39 DIFFERENTIAL MIGRATION IN NORTH CAROLINA 1955-1960: IMPLICATION FOR THE AGRICULTURAL EXTENSION SERVICE. McNeill, Harold M. Wisconsin Univ., 67-6813, MF \$3.00, HC \$7.40, 147p., 67.

Differential migration in N.C. and its implication for Agricultural Extension Service were analyzed using metropolitan-nonmetropolitan State Economic Areas as basic units and the section of the 1960 U.S. Census showing place of residence in 1955. Analysis included computation of migration rates to show streams of migration out of the state and between SEA's, index of age selectivity of migration for SEA's, and distribution of characteristics of streams of migrants into the Charlotte SEA. Migration centralized the population in the Piedmont Region and migration patterns of whites and nonwhites differed in important ways. Positive age selection of migrants occurred most consistently between 18-30. Most migrants going to Charlotte settled in the central city though greater impact was felt in the ring. Migrants and nonmigrants in Charlotte had similar economic and educational status. Migrants from nonmetropolitan areas tended not to fare as well as other migrants. Research to determine how Extension could help migrants in central cities and rings and how migration information can be used in social and economic planning needs to be done.

See also: Item 20 education for leisure; 312 school superintendents; 321 lawyers; 328 computer programmers; 329 electronic technicians; 387 Nigeria; 418 family needs for community college programs; 493 church programs in Jamaica; 327 manufacturers representatives; 333 sales executives; 298 engineering managers; 345 vocational needs of South Dakota youth; 307 psychiatric nurses; 310 medical assistants; 304 married nurses; 480 army officers; 420 nutrition education needs of homemakers; 415 knowledge and attitudes about mental illness; 411 March of Dimes workers; 401 attitudes toward education; 367 beginning farm operators; 378 horticultural workers; 377 horticultural workers; 366 non-farm agricultural occupations; 363 police; 359 savings and loan employees; 354 vocational needs of school dropouts; 217 older, poor rural people; 213 elderly non-institutionalized; 236 poor urban Negroes; 223 women community influentials; 227 wives of school superintendents; 225 older female workers; 178 industrial training directors

1550 DETERMINATION OF OBJECTIVES

- *40 THE DEVELOPMENT AND USE OF A CLASSIFICATION OF EDUCATIONAL OBJECTIVES TO STUDY THE OBJECTIVES OF FOUR COMMUNITY ADULT EDUCATION AGENCIES. Russell, George Darrell. Wisconsin Univ., 64-9691, MF \$3.15, HC \$11.05, 242p., 64.

This study sought to determine the overall educational objectives of contemporary adult education in the United States, and those of selected aspects of the adult education curriculums (sampled during February 1 - April 30, 1963) of the Cooperative Extension Service, the public libraries, the University Extension Center, and the vocational and adult schools in Outagamie and Winnebago Counties, Wisconsin. In Phase 1, a 22 category classification of educational objectives was organized in terms of man-as a developing organism, as an interacting organism, and as a producing and consuming organism. In Phase 2, data on "most dealt with," "next most dealt with," and "least dealt with" educational objectives of 265 adult education activities were reported within the framework developed

in Phase 1. Findings showed a general emphasis on practical, applied, and skill oriented objectives rather than on academic, theoretical, and intellectual objectives.

- *41 A CONCEPTUAL SCHEME FOR PRE-PROGRAM DIAGNOSTICS IN ADULT EDUCATION. Martin, James Fay. Indiana Univ., 64-5132, MF \$3.05, HC \$10.60, Ed. D. thesis, 233p., 63.

This study involved constructing a conceptual scheme for identifying and developing the process of preprogram diagnosis in adult education. Five basic steps were formulated and validated. Step 1 (determining who is to diagnose whom) is required in order to know what data to gather, how to gather the data, and how to derive a final diagnosis. Other steps are determining the criteria of adequacy (underlying values and concepts, objectives, and the psychological base for groups, individuals, institutions, and communities); identifying symptoms; identifying problems with or without raw data; and identifying educational needs at the levels of individual, task, and group maintenance need.

See also: SECTION 1505 PROGRAM PLANNING PROCESSES; 1510 ASSESSING EDUCATIONAL NEEDS; 1890 RELATIONS WITH GOVERNING, ADVISORY GROUPS; Item 462 objectives in public school adult education; 278 public service function of universities; 1 Whiteheadian principles in university adult education; 52 planning resource development in Wisconsin county

1600 RECRUITMENT

See: SECTION 1300 PARTICIPATION PATTERNS OF ADULTS; 1510 ASSESSING EDUCATIONAL NEEDS; 1650 SELECTION, PREDICTION OF SUCCESS; 1700 RETENTION

1650 SELECTION, PREDICTION OF SUCCESS

See: SECTION 1300 PARTICIPATION PATTERNS OF ADULTS; 1510 ASSESSING EDUCATIONAL NEEDS; 1700 RETENTION; Item 349 selection of unemployed manpower trainees; 303 predicting success in Army medical training; 268 influence of prior school experience, other factors on persistence in adult high school; 247 MMPI as predictor of vocational rehabilitation success; 276 factors related to college success; 271 high school records as predictors of college success; 355 psychological needs and maturity among manpower trainees

1700 RETENTION

- *42 A STUDY OF CLASSROOM FACTORS RELATED TO DROPOUTS IN ADULT EDUCATION. Davis, George S. Florida State Univ., 64-3592, MF \$2.76, HC \$6.40, 133p. 63.

The relationship was studied between dropouts from adult education classes and (1) selected classroom activities occurring during the first class session and (2) students' attitudes toward the first session. Twenty-nine previous adult dropout studies were reviewed. Voluntary adult participants in 34 Personal Survival in Disaster classes in the Florida Civil Defense Adult Education Program in 1961 were studied. The Kropp-Verner Attitude Scale was completed at the close of the first class meeting. Class scores on the Attitude Scale, class frequencies on the classroom activities list, and class percentages of dropouts were ranked in order. Statistics utilized consisted of Spearman's rank correlation method, Kendall's coefficient of concordance, and chi square. Limited support was given for the conclusion that the instructor should talk to his class, and should use the activities selected for this study in the first class session.

See also: SECTION 1300 PARTICIPATION PATTERNS OF ADULTS; 1510 ASSESSING EDUCATIONAL NEEDS; 1650 SELECTION, PREDICTION OF SUCCESS; Item 233 money as incentive among low aptitude work groups; 210 community service activities as incentive in 4-H groups; 270 reasons for dropout and return in technical institute; 269 persistence in adult evening school

1750 COUNSELING, GUIDANCE

- 43 AN EVALUATION OF THE GUIDANCE PROGRAM IN THE LOS ANGELES CITY ADULT SCHOOLS. Stewart, Robert Miller. California Univ., 67-9,035, MF \$3.00, HC \$8.20, Ed.D. thesis, 177p., 67.

This study evaluated the guidance program of the Los Angeles City Adult Schools to determine if existing guidance services are adequately meeting clientele needs. Criteria obtained from the literature were submitted to a panel of consultants, who used a rating scale to identify significant criteria. An appraisal instrument was devised and refined; information was then gathered in structured interviews with principals, vice-principals, and counselors at 27 adult schools, and by scrutiny of their facilities and files. Significant findings included the predominance of educational over vocational counseling; extremely limited information services; inadequate data on students' personal, social, and mental status; little attention to student vocational interests, aptitudes, preferences, personality, out-of-school activities, or work experience; the expenditure of much working time on routine clerical duties because of personnel shortages; lack of suitable training and experience among about half the guidance counselors; and poor provision for followup services. Recommendations dealt with testing, vocational guidance, and the need for guidance-minded faculty and administrators. (Eleven tables and 94 references are included.)

See also: SECTION 1650 SELECTION, PREDICTION OF SUCCESS: Item 316 role of guidance coordinator in teacher in-service training; 317 evaluation of NDEA counseling institutes; 246 supportive counseling in tuberculosis treatment; 245 counseling in dental treatment

1800 STUDENT AID AND SERVICES

- 44 THE SERVICEMEN'S READJUSTMENT ACT OF 1944: A CASE STUDY OF FEDERAL AID TO HIGHER EDUCATION, 1944-1954. Bloom, Samuel B. California Univ., 64-5196, MF \$4.20, HC \$14.85, 328p., 63.

Public Law 346, the Servicemen's Readjustment Act of 1944, as applied to institutions of higher learning, is the theme of this case study which explores the sources of the law--the hearings and Congressional debate. The operation of the law is explained with emphasis on the vocational guidance program through which a close connection between the administering agency of the law, the Veterans Administration, and the educational institutions was made. This study directs attention to the role of the law in enabling many veterans to attend schools, including denominational ones; and questions the wisdom, as a discretionary, not constitutional matter, of providing federal funds for religious education.

- *45 STUDENT GOVERNMENT: ORGANIZATION AND FUNCTION IN MARRIED-STUDENT HOUSING AREAS OF SELECTED COLLEGES AND UNIVERSITIES. Tempel, Norman F. Wyoming Univ., Ed.D, thesis, 181p., 67.

This study, conducted in 12 institutions in Colorado, Wyoming, Utah, Idaho, Montana, New Mexico, and Arizona, investigated the form and function of student government in college and university family housing areas; examined pertinent literature, legislative action, and litigation; sought problems common to students in family housing that could be approached or solved through student government; and analyzed questionnaire data on 659 married students, their needs, and the operational status of student government organization affecting student housing residents. Among the major conclusions were these: (1) the mayor-council plan is the most successful form of self-government structure for married student housing areas; (2) married students are not generally considered as influential in campus affairs as unmarried students, and feel that they are not given an adequate voice in determining housing policies; (3) they are generally satisfied with physical facilities and housing rules and regulations, but there are complaints in some institutions of lack of enforcement; (4) problems are most often related to parking, traffic control, and housing maintenance. Numerous policy and other recommendations were made.

See also: Item 254 stipends in adult basic education

1850 ADMINISTRATIVE PRACTICES

See: SECTION 1890 RELATIONS WITH GOVERNING, ADVISORY GROUPS: Item 463 handbook for public school adult education directors; 477 administration of Army GED programs; 472 school district reorganization; 466 consolidating school districts; 432 growth model of adult education institutions; 457 Michigan junior colleges; 458 Washington community colleges; 448 centralizing decision making in Cooperative Extension; 194 county extension director; 440 university off-campus centers; 273 graduate extension education in NUEA universities

1890 RELATIONS WITH GOVERNING, ADVISORY GROUPS

- 46 COMPOSITION AND OTHER CHARACTERISTICS OF VOLUNTEER BOARDS. Josephson, Clifford Russell. Cornell Univ., 64-3695, MF \$2.75, HC \$6.00, Ed.D. thesis, 122p., 63.

In a study on the composition and other characteristics of board of directors of voluntary social service agencies, data were obtained from 783 board members of 121 Community Chest affiliated agencies in 51 upper New York State communities. Respondents were 65 percent male and 35 percent female. About one percent were Negro. Sixty-three percent were Protestant, 22 percent were Catholic, and 14 percent were Jewish. Earnings of over \$12,000 a year were reported by 55 percent, and 85 percent had had at least four years of college. Professionally trained people were 42 percent, and housewives 23 percent, of those serving. Most (69 percent) were between the ages of 40 and 59. Most rated board members above average in intelligence, and negative peer characteristics were noted by only 18 percent. Only 48 percent had had formal training. The major sphere of duty was policy making, followed by meetings, fund raising, and announcements. Major motives noted were a sense of duty, need for an outlet, prestige seeking, and business advantages. Patterns of participation by sex, race, and religion were also found.

- 47 THE RELATION OF LEADER BEHAVIOR DIMENSIONS AND GROUP CHARACTERISTICS TO COUNTY EXTENSION ADVISORY COMMITTEE PERFORMANCE. Carter, Cecil E., Jr. Ohio State Univ., 68-2961, MF \$3.00, HC \$9.25, 201p., 67.

The purposes of this study were to identify group characteristics of County Extension Advisory Committees which were related to the effective performance of the committees and to identify the leadership behavior dimensions of County Extension Agent Chairmen which were related to the effective performance of County Extension Advisory Committees. The design of the study included the description of 13 group dimensions of County Extension Advisory Committees, the description of the County Extension Agents' leadership behavior on the dimension of initiation of structure and consideration by County Advisory Committee members, and the evaluation of County Extension Advisory Committees on three functions of effectiveness by the District Supervisor. Two Question-

naires were used to collect the data, one to secure the data on the group situation and the other on the leadership behavior dimensions of the County Extension Agent Chairmen. A stratified random sample was secured by selecting five Advisory Committees from each Extension district. Among the conclusions, based on findings, was that the performance of County Extension Advisory Committees was more effective when the County Agent Chairmen were perceived to provide initiation of structure leadership behavior for the Advisory Committees.

- 48 SOCIAL INTERACTION AND PERSONAL AND SOCIAL CHARACTERISTICS OF THE MEMBERS OF AN AREA DEVELOPMENT LEADERSHIP GROUP. Lind, Marvin Burdett. Iowa State Univ., 68-5962, MF \$3.00, HC \$7.80, 166p., 67.

The orientation, interaction, and personal and social characteristics of an area development leadership group in Iowa were analyzed with the aim of helping plan educational efforts for the Extension Service. Objectives were to determine the extent of communication of selected social system elements by the state staff to the leadership group; perceptions of leadership members' role; members' attitudes and opinions on institutional changes and on the effect the group would have on the outcome of the activity; the systematic linkage represented by members; and member characteristics as compared with those of power actors in other Iowa studies. Knowledge of stated goals and objectives and area socioeconomic conditions, views on leadership group roles, and beliefs about institutional changes and the impact of the leadership group were similar for the area group and state staff members. Influence was significantly related to group members' organizational participation and their contacts throughout the area.

- 49 FACTORS ASSOCIATED WITH EFFECTIVE DAIRY PLANNING COMMITTEES FOR CO-OPERATIVE AGRICULTURAL EXTENSION WORK IN LOUISIANA. Naguin, Claude John. Louisiana State Univ., 65-3388, MF \$3.30, HC \$11.50, 255p., 64.

A study was undertaken on Dairy Sub-Committees to obtain and interpret data that would be helpful to the Agricultural Extension Service in developing more effective sub-committees in dairying and in other areas. A major problem was to determine factors associated with effective functioning of the sub-committees. A standard of performance, consisting of sixteen criteria and a number of conditions under each criterion was developed and evaluated, and then a weighted score was developed for each criterion. Analysis of both the personal and occupation characteristics of committee members and committee operating effectiveness was involved. Data were obtained from group interviews with 88 sub-committee members and 27 extension agents, and from personal interviews with the agents responsible for the organization and operation of each committee. Among the conclusions of the study were that the subcommittee members were well-selected and had a good understanding of their role; that differences of opinion between members and agents sometimes affected committee effectiveness; and that the skill of the extension agents in using the committee was the most important factor in committee effectiveness.

- *50 FACTORS AFFECTING THE ALLOCATION OF COUNTY RESOURCES TO AREA SPECIALISTS IN AGRICULTURE IN KANSAS. Ross, Henry Eugene. Wisconsin Univ., 66-13,831, MF \$3.00, HC \$7.40, 155p., 66.

The study investigated attitudes, and influences thereon, among county commissioners, selected members of county extension executive boards, and five selected farm leaders toward recommending the addition of area specialist positions in agricultural subject matter in the Kansas Co-operative Extension Service (CES), and toward the method of financing these positions. Data were gathered by personal interviews in ten rural counties representing ten areas of socioeconomic similarity. A 17-item, five-point rating scale was developed. Scores indicated, among other things, the respondents' belief that additional specialists are needed. Eight variables describing area specialist services (determining farmers' educational needs, on the farm assistance, "in depth" schools on specific topics, and others) correlated significantly with the recognized need for more area specialists. Most respondents agreed that the counties and the state CES should finance added positions. However, most respondents disagreed with eliminating one county position to support additional specialist positions, which suggests that overall county positions will have to be increased.

See also: SECTION 1850 ADMINISTRATIVE PRACTICES: Item 327 attitudes of managers toward vocational programs; 498 board participation in decision making in voluntary group service agencies; 455, 449, 450, 452, 453, 454, 453 views of various clientele groups on various aspects of Cooperative Extension

2200 LEARNING ENVIRONMENTS

2210 COMMUNITY EDUCATION AND DEVELOPMENT

- 51 AN EVALUATION OF THE RELIABILITY OF THE SELF-STUDY METHOD IN COMMUNITY DEVELOPMENT. Knittel, Robert Edward. Southern Illinois Univ., 67-15, 863, MF \$3.25, HC \$11.25, 250p., 67.

The concept of self-study method in community development is discussed as it relates to anthropology, and a program conducted in Cairo, Illinois in 1956-57 is examined to determine if the self-study goals were met. The ecological, historical, and geographical setting is given, along with attitudes and concerns of residents, ascertained from newspapers previous to the program. A running account of efforts in the program includes such problems as racial tensions and segregation, problems in industrial location, and leadership and community participation. The impact of the self-study program was determined from personal interviews and questionnaires completed ten years after the self-study, observations, and reviews of newspapers and materials from the program. It was concluded that the year-long study did have some effect on long range activities toward community goals, although immediate results were not readily apparent. Each self-study goal is discussed as to the extent it was reached. The appendix includes the method used in gathering information from the newspaper, use of the questionnaire and summary of information gathered and published by the self-study group.

- 52 APPRAISAL OF A PROCESS OF PLANNING FOR TOTAL RESOURCE DEVELOPMENT IN A WISCONSIN COUNTY. Whale, William Brock. Wisconsin Univ., 66-13, 462, MF \$3.60, HC \$12.60, 277p., 66.

Citizens of Brown County, Wisconsin, participated in planning for Total Resource Development, led by professional extension personnel who oriented study group members to planning purposes and procedures and provided resource information. Data to determine how the planning process met six conditions were obtained from questionnaires, analysis of tape records of planning meetings, group final reports, and lists of needs identified by professional personnel. Influence of professionals on group decisions was low in three groups and high in one. Most conditions were met in the two groups comprised of men, in low age, low education males, and in high age, high education females. The most extensive use of a decision-making procedure was by chairmen who had participated in the training session and who had previous experience in leading decision-making groups. Most thorough investigation of a subject matter area was conducted by group members having previous knowledge of the subject. As there was more dissimilarity than similarity between needs identified by citizen groups and those identified by professionals, both sources should identify needs from which to establish educational objectives.

- *53 A STUDY OF RELATIONSHIPS BETWEEN CERTAIN DIMENSIONS OF SELF AND PRE-
DISPOSITIONS TO COMMUNITY LEADERSHIP BEHAVIOR. Gerhart, Paul Jacob.
Michigan Univ., 67-8255, MF \$3.00, HC \$6.20, 126p., 66.

The study explored the possible relationships among interpersonal characteristics of one's self, ideal community leadership style, optimism toward community, restrictive-permissive attitude toward group member behavior, restrictive-permissive approach to community problem solving, conceptual knowledge and skill in the pairing of problems of groups and communities, and other self-descriptive information. The data were obtained from forty community leaders who attended a workshop on group and community development. The Interpersonal Check List developed by the Kaiser Foundation Psychology Project was used to measure characteristics of self and ideal community leadership style. It was found that one's self characteristics tend to influence the interpersonal style one selects as being the ideal posture for a community leader to adopt. Self characteristics of forcefulness, independence from others, and trust in others tend to influence the extent to which ideal community leadership style is one of dominance. Friendliness and sympathetic attitudes as self characteristics tend to influence the extent to which one sees affection toward others as an aspect of ideal community leadership style. (An extensive bibliography and the questionnaire used are included.)

- *54 THE CONCEPT OF COMMUNITY DEVELOPMENT WITH SPECIAL REFERENCE TO ITS
PRESENT AND FUTURE APPLICATIONS IN PAKISTAN. Ahmed, Firoza. Florida
State Univ., 64-3584, MF \$4.55, HC \$16.00, 354p., 63.

Community development programs are analyzed in this study to clarify their democratic philosophical orientation, to identify programs in India, Egypt, Iran, Afghanistan, the Philippines, and Burma having potential significance for Pakistan, and to suggest social service and community development activities that should be expanded or inaugurated in Pakistan. The present programs in Pakistan can be strengthened through clarification of their theoretical bases to eliminate patch-work activities. The resources and efforts of the administrators, the community organizers, and the community leaders should be coordinated through a Ministry of Community Development. The Union Councils should be empowered to plan and approve community projects, but not to regulate their day-to-day execution. Administrative personnel should be required to have specialized technical training and field experience in social welfare and community development. Improvements are needed in record keeping and disseminating data concerning community development programs. There must be wider use of pilot and demonstration projects.

See also: SECTION 2230 RURAL COMMUNITIES; 2240 URBAN ENVIRONMENTS; 5500 COMMUNITY SERVICES AND PROGRAMS; 5550 COMMUNITY DEVELOPMENT PROGRAMS - FOREIGN; Item 34 typology of community leadership

2230 RURAL COMMUNITIES

- *55 A RESTUDY OF THE RELATIONSHIP OF SELECTED CULTURAL CHARACTERISTICS TO THE ACCEPTANCE OF EDUCATIONAL PROGRAMS AND PRACTICES AMONG CERTAIN RURAL NEIGHBORHOODS IN WISCONSIN. Maughar, Wesley T. Wisconsin Univ., 64-12,735, MF \$3.95, HC \$10.15, 225p., 64.

This study aimed at a comparison between the acceptance of selected educational programs and practices by neighborhood groups that are homogeneous or heterogeneous according to their ethnic and religious characteristics. Programs and practices were represented by opinions and actions toward school programs, adoption of recommended farming practices, and participation in formal organizations. For the 1963 study, groups were taken from 19 homogeneous and 19 heterogeneous neighborhoods which had been studied in 1953 and the same questionnaire was used to interview the occupants of the same farmsteads. Major findings suggest that differences in attitude toward educational practices exist between different ethnic and religious groups; neighborhoods which are heterogeneous are more favorable to school programs and practices than homogeneous ones. Over the ten-year period both neighborhoods indicated significant change in attitude toward improved educational curriculum and facilities and an unfavorable attitude change toward the need for joint parent and teacher curriculum planning.

See also: SECTION 2210 COMMUNITY EDUCATION AND DEVELOPMENT; 5500 COMMUNITY SERVICES AND PROGRAMS; 5550 COMMUNITY DEVELOPMENT PROGRAMS - FOREIGN; Item 412 secondary school health programs in rural Wisconsin; 201 participation of rural young adults; 203 migration of rural youth in Nebraska; 217 older low-income rural people; 205 Wisconsin rural youth participation in voluntary organizations; 208 educational and occupational plans of Wisconsin rural youth; 27 educational attitudes of rural adults; 24 participation of Florida rural young adults

2240 URBAN ENVIRONMENTS

See: SECTION 2210 COMMUNITY EDUCATION AND DEVELOPMENT; 5500 COMMUNITY SERVICES AND PROGRAMS: Item 281 urban problems and community college; 206 effect of farm migration on urban 4-H programs; 157 training needs of urban extension agents; 33 techniques for studying urban adult education needs; 37 needs in declining and non-declining urban areas

2300 RESIDENTIAL EDUCATION

- *56 A HISTORY OF RESIDENTIAL ADULT EDUCATION. Alford, Harold Judd. Chicago Univ., 442p., 66.

This study traces in detail the lines of development of residential adult education, from the idea which preceded the Grundtvig-Kold Danish folk high schools to the multiplicity of forms existing today, and the social and personal forces which have helped shape its development in various cultural settings. Programs in an agrarian society, an industrial society, and an expanding society are exemplified, respectively, by the Danish movement of the nineteenth and twentieth centuries, British short-term residential colleges and antecedents in the form of Workers' Educational Association work and other activities, and the rise of the Chautauqua movement, Danebod, and such specialized American schools as the Highlander Folk School. Residential centers and programs at the University of Minnesota and the University of Florida are described, together with Kellogg Foundation undertakings at Michigan State University and elsewhere. Programs at Oxford University and in Canada, Denmark, Israel, Germany, and black Africa are reviewed, and present trends, conditions, and points of view are discussed. An appendix, 242 references, and a historical overview (1851-1951) are included.

- 57 CONTINUING EDUCATION CENTERS IN AMERICAN UNIVERSITIES. Shute, Reginald Wayne. University of Southern California, 65-3117, MF \$3.05, HC \$10.60, Ed. D. thesis, 235p., 64.

A review of the literature on the development and administration of continuing education centers in the U.S. was undertaken. On the basis of the literature review, criteria for the effective administration of university continuing education centers were developed into questionnaire form. The criteria were then evaluated by personal interviews at eleven university centers and correspondence with eleven other centers. The conclusions of the study were: (1) Continuing education centers represent a significant agency in American adult education; (2) Continuing education centers have been defined as adult education with programming, teaching, and residency; many places which are called continuing education centers do not provide these elements; (3) The purposes of continuing education centers are not clearly understood and in some cases not deemed important by directors of centers and university administrators; (4) The list of essential criteria developed represents a high standard in the administration of centers; therefore, those centers which fulfill the criteria may be considered ideal continuing education centers.

- *58 PROGRAM PLANNING AND PROGRAM EFFECTIVENESS IN UNIVERSITY RESIDENTIAL CENTERS. Welden, J. Eugene. Chicago Univ., 168p., 66.

The purpose of this study was to determine the differences between (a) 22 conferences planned without participation representation and (b) 25 planned with participation representation, on 3 measures of program effectiveness--(1) participants' perception of its relevance to personal motives, (2) their expressed satisfaction with it, and (3) their expressed interest in continuing educative activity. A Conference Evaluation form was constructed, pretested, and administered to 1026 men and women attending conferences in 1965 at 5 university residential centers. These conferences were randomly drawn within the 2 types of planning. The majority were directed to increasing vocational or occupational competency. Demographic factors of age (36-55), sex (mostly men), educational level (mostly college graduates), and previous attendance at conferences (59 percent) showed no differences between the groups of participants. Findings showed that participant perception of conference relevance to his personal motives and his satisfaction with it were greater in type-b conferences. The interest inventory did not show significant differences between the 2 groups. It did appear, however, that programs without participant representation ranked higher on acquisition of knowledge and programs with representation ranked higher in associational-participation dimension.

- *59 GUIDELINES FOR PLANNING AND EXECUTING UNIVERSITY CONTINUING EDUCATION CENTER PROGRAMS--THEORY AND PRACTICE. Jones, Charles Ollie. Florida State Univ., 67-294, MF \$3.00, HC \$5.80, Ed.D. thesis, 117p., 66.

This study was undertaken to compare the judgments of leaders in adult education regarding the importance of certain guidelines for planning and executing programs of university continuing education centers with the degree to which these guidelines were followed by selected university continuing education centers during the first six months of 1964. Questionnaire responses from centers assisted by the Kellogg Foundation provided the data on actual practices. Ten adult educators rated each guideline as to its importance in implementing center educational programs, and ranked in order of importance the various functions of professional staff members and conference coordinator-consultants. The guidelines elicited consistent responses from the educators, and compliance with the guidelines was consistent among the centers. The educators agreed that formulation of objectives, evaluation, research, planning, and postconference activities were extremely important in program implementation. Centers practiced most frequently those guidelines which were purely descriptive, one example being the guideline pertaining to development of program content of at least freshman-sophomore college level. Correlations between guideline ratings and actual practices were negative; correlations between rankings of functions and the actual practice thereof were low but positive.

- *60 AN EVALUATIVE ANALYSIS OF SELECTED UNIVERSITY CONFERENCE PROGRAMS CONDUCTED AT KELLOGG CENTER FOR CONTINUING EDUCATION MICHIGAN STATE UNIVERSITY. Densmore, Max L. Michigan State Univ., 65-14204, MF \$3.00, HC \$8.00, 191p., 65.

An analysis of residential continuing education programs conducted by University Conference Services at Michigan State University's Kellogg Center for Continuing Education was conducted in order to develop an instrument and methodology with universal application to measure conference success and participant satisfaction. Data were gathered from 630 respondents attending ten conferences, who were classified by Bureau of the Census industrial areas of origin, occupational level, and sex. Participants' perception of their learning and the relationship to over-all satisfaction with the conference experience were analyzed. The Kropp Verner Reaction Scale was extensively used in measuring conference success and overall satisfaction. It was found that women favored conferences more than men; a significant difference existed between participant reactions when classified by industry of employment; program satisfaction was rated differently depending upon occupational level; and a mutual relationship existed between how participants judged the quality of their learning experience and degree of total satisfaction. Numerical indexes of participant satisfaction and conference success were developed for each conference analyzed.

See also: SECTION 3000 CONFERENCES, INSTITUTES, WORKSHOPS; Item 166 commitment of university faculty to conference programs; 168 conference director as university boundary definer; 98 effects of residential human relations training on attitudes of supervisors

2350 ORGANIZATIONAL DEVELOPMENT

- *61 A METHOD AND INSTRUMENT FOR PREDICTING THE CONSEQUENCES OF INTRA-ORGANIZATIONAL ACTION. Anderson, Robert Charles. Michigan State Univ., 64-915, MF \$2.75, HC \$9.45, 210p., 63.

An attempt was made to design and develop an analytical research method and instrument for applying certain theoretical intraorganizational concepts. The aim was to describe, explain, and predict the consequences of three independent variables affecting the extent of goal achievement in a specific development organization: (1) how clearly the organization's role is perceived; (2) how fully the organization defines perceived congruent behavior expectations for its position incumbents; (3) how interested the incumbents are in achieving organizational goals. Data from an open-ended question device were used to form a rating scale for measuring the variation, or the degree of consensus, among members of the organization. Flexibility, precision, efficiency, and analysis from within were among the salient features noted in the methodology. The method and instrumentation have been tested once, in a case study of the Michigan Livestock Health Council.

- *62 RELATIONSHIPS BETWEEN CONFORMING JUDGMENT AND EMPLOYEE RANK AND BETWEEN CONFORMING JUDGMENT AND DOGMATISM IN AN EMPLOYMENT GROUP. Long, Huey Billy. Florida State Univ., 67-303, MF \$3.00, HC \$3.00, 56p., 66.

This study assessed relationships between conforming judgment and employee rank and between conforming judgment and dogmatism among Florida Forest Service employees. Fifty-nine employees were tested for conforming behavior under varying conditions of dogmatism, institutional rank, and relative rank pressure. Rokeach's Dogmatism Scale was used, as well as a version of Asch's vertical line test for measuring conformity. Persons above, below, and equal to the subjects purposely made incorrect judgment decisions in the subjects' presence. Findings included the following: (1) when dogmatism scores were similar, conformity differed significantly with superiors, subordinates, and peers, and according to a subject's own rank; (2) dogmatism was not significantly related to age or frequency of conformity; (3) conformity was not significantly related to years of service; (4) dogmatism was negatively related to years of service. It seems that employees tend to conform to superior's opinions and to show greater independence in the presence of subordinates. The negative relationship between dogmatism and tenure may suggest that highly dogmatic people are not employed by the agency or that they soon leave.

See also: SECTION 2920 HUMAN RELATIONS, LABORATORY TRAINING; 6200 MANAGEMENT AND SUPERVISORY DEVELOPMENT

2600 INSTRUCTIONAL METHODS

2630 TEACHING STYLES AND TECHNIQUES

- *63 THE DEVELOPMENT OF A CONCEPTUAL SCHEME FOR ANALYZING AND CLASSIFYING METHODS, AND ITS APPLICATION TO SELECTED METHODS USED IN TRAINING IN INDUSTRY. Cohen, Charles Solly. Columbia Univ., 65-4722, MF \$2.60, HC \$9.70, Ed.D. thesis, 213p., 64.

The heart of this study is a conceptual scheme for analyzing and classifying industrial training methods in terms of a "reality" scale and a "feedback" scale. The scales are based on a structural analysis of educational experience in terms of the learner, the agent(s), the time span, the process stimuli, process behavior, the criterion stimulus, and the criterion behavior. Methods are seen as a function of relationships between process and criterion elements, and between process stimuli and process behavior. Interaction between criterion elements and process elements constitutes the "reality" dimension; the influence of process behavior on process stimuli constitutes the "feedback" dimension. Educational experiences can be analyzed, and methods ranked, with these scales. The scheme is applied to business gaming and case discussion, and ratings on the two scales are suggested for each method.

- 64 METHOD ORIENTATIONS OF ADULTS FOR PARTICIPATION IN EDUCATIVE ACTIVITIES. Blackburn, Donald James. Wisconsin Univ., 67-12,412, MF \$3.65, HC \$12.85, 284p., 67.

A study was made of 611 residents of predominantly rural Columbia County, Wisconsin to determine the method orientation of adults for participation in educational activities in vocational education, hobbies and recreation, academic and general education, religion, morals and ethics, home and family life, personal development, current events, public affairs, and citizenship. Group oriented methods included classes, discussion groups, short courses or lecture series, studying books or other printed matter, consulting experts or specialists, reading magazines and newspapers, and watching television at home. Certain socioeconomic and psychological background factors were also considered. For the majority of the subject areas, group methods were preferred by the majority of adults. Within subject areas, adults preferring individual methods were more likely to be older, with relatively low educational levels and family incomes, with the highest proportion to individual orientation appearing among women with eight or less years of schooling.

- 65 RESIDUAL GAIN IN LEARNING AS A CORRELATE OF DEGREE AND DIRECTION OF EFFORT IN FORMAL ADULT EDUCATION PROGRAMS. Dannenmaier, William Deal. Washington Univ., 64-8262, MF \$2.75, HC \$5.40, 109p., 63.

A study was made of the relationship between two types of study behavior and three kinds of learning--knowledge, comprehension, and application. Two Study Behavior scales were developed by homogeneity analysis. Behavior One reflecting demonstrated acceptance of the established course content and goals and Behavior Two reflecting the tendency of students to develop their own goals and content. The scales of learning were developed rationally and represented the content of the class textbook. Part-time adult students in each of two first semester psychology classes at Washington University were tested, each class being treated as a separate study. Correlational and analysis of variance techniques were applied in the development of the instruments, the control of extraneous variables, and the analysis of the data. Study Behavior One was an effective predictor of gain in knowledge and there was evidence of a positive relationship to gain in comprehension and application. Study Behavior Two did not appear related to gain in knowledge or in comprehension, but there was evidence suggesting a relationship to gain in application. (Tables and graphs exhibit the data.)

- 66 LEARNING ORIENTATION PRIORITIES OF COOPERATIVE EXTENSION CLIENTELE IN SELECTED PENNSYLVANIA COUNTIES. Stauffer, Robert Harry. Pennsylvania State Univ., 67-5974, MF \$3.00, HC \$4.40, 66.

To test the Houle theory that adults have three orientations toward learning--the goal, the activity, and the knowledge orientations, a revised Sheffield Learning-Orientation Scale was administered to 704 adults to determine learning orientation priorities of men and women who attended 32 agricultural and home economics meetings of Cooperative Extension in 16 Pennsylvania counties. Demographic factors included were age, sex, years of formal education, occupation, and degree of

participation, statistical treatment included factor analysis, correlation, and analysis of variance. Three primary learning orientations found among Cooperative Extension clientele were knowledge, affiliation, and occupation. Individuals with a knowledge orientation sought intellectual satisfaction through learning while affiliation-oriented individuals sought personal associations and friendships. Alleviation, civic altruism and insight were secondary learning orientations. The occupation orientation had higher priority among men than women. The older clientele attended meetings for affiliation reasons and alleviation of boredom and frustration. Homemakers desired knowledge and association with others. Farmers were interested in occupational improvement. Manager-Professionals, sales and service personnel, and young adults considered knowledge and occupational improvement to be the important reasons for attending extension meetings. The knowledge and affiliation orientations found were related to Houle's knowledge and activity categories, and the alleviation and civic altruism orientations to Sheffield's need for activity and personal and societal goals orientations. Neither described the insight orientation.

- *67 CHARACTERISTICS OF NONCREDIT UNIVERSITY EXTENSION STUDENTS. Dow, June Barth. California Univ., 65-12,655, MF \$3.00, HC \$8.80, Ed.D. thesis, 195p., 65.

Characteristics of noncredit University Extension enrollees of 1964 were studied to explore Houle's typology of the continuous learner. A structured questionnaire composed of 47 items was presented to 24 participants in interview sessions. It was found that most participants did not fit Houle's classification of being activity-oriented; a few fitted the category of being learning-oriented; and none were goal-oriented learners. Course content was the most important determinant of enrollment, although there was more motivation to seek insight and understanding than facts. Participants read and appreciated nature in leisure time; sought interpersonal relationships supportive of their quest for personal growth through learning; were little influenced by peer's opinions or criticism; and did not use self study, correspondence instruction, or mass media for educational purposes. Group interaction in extension programs was not valued for the social experience but was perceived as an aid to achieving synthesis of knowledge.

- 68 CHANGES IN PERCEPTION OF SELECTED CONCEPTS THAT ACCOMPANY DIFFERING LEADERSHIP TREATMENTS. Callan, Laurence Brian. Arizona State Univ., 67-3196, MF \$3.00, HC \$6.20, 130p., 67.

A study was made of effects of two different leadership treatments on perception of nonverbal stimuli relating to concepts of leaders, authority, and cohesion as measured by changes in the Semantic Differential Scale. Subjects (28 Yaqui Indian and Mexican-American members of the Neighborhood Youth Corps) were randomly assigned to an autocratic group, with closely specified tasks and goals and little interaction,

or a democratic group, marked by emphasis on interaction among youth and with the leaders, with leadership evolving from the group. Stimuli consisted of color slides on ten concepts or roles (doctor, judge, nurse, and others) representing leaders, authority, and cohesion. Based on findings, it was concluded that perceptions of nonverbal stimuli can be changed following a leadership treatment, and that the democratic treatment is preferable. However, the experimental design and other circumstances created doubt whether leadership was the sole influence. (Included are the concept slides, test materials, seven tables, and a bibliography.)

- 69 COMPARISONS OF ACQUISITION, RETENTION, AND TRANSFER AMONG THREE STYLES OF LEARNING. Larson, Gerald Lew. Illinois Univ., 64-6097, MF \$2.75, HC \$5.20, 102p., 63.

This study sought to determine whether teaching styles permitting different amounts of student discovery differentially affect acquisition, retention, and transfer of coding principles, and whether different amounts of task-related behavior are generated during the retention interval. Training consisted of one problem illustrating each of six coding principles, with a decoded example for derivation of the code plus a second message to be decoded. Subjects (college students) were divided into "no-discovery" subjects, who received an explanation of the principles involved in each example; a "guided discovery" group, who uncovered the principle in the decoded example with the aid of Socratic questioning; and a "complete discovery" group, who received no help. All groups were allocated four minutes per problem. Findings included the following: (1) the "no discovery" group performed best on the criterion test while the "guided discovery" group performed most poorly; (2) no significant differences among groups were obtained on a retention test ten days later; (3) the "guided discovery" group were the highest on the transfer test, which required encoding rather than decoding skill. Reversals in performance between the criterion and transfer were attributed to retroactive inhibition resulting from the experimenter's summary of principles concluding the training period.

- *70 OUTCOMES RESULTING FROM THE USE OF TWO DIFFERENT TRAINING PROCEDURES IN ART EDUCATION FOR ADULTS. Shaffer, Mary Louise. Indiana Univ., 65-2395, MF \$2.75, HC \$9.45, Ed.D. thesis, 211p., 64.

This study sought to measure differences in attitude changes in two different groups of adult learners (21 elementary schoolteachers) in art education. The experimental group was taught using a nondirective teaching style based on freedom of expression, active individual participation, sharing in program development, and voluntary learning activities. The control group was taught in an authoritarian style. Areas of attitude change examined were attitudes toward art, the teaching of art, and oneself as a teacher of art. Sources for data on attitude

changes within and between the groups were an attitude scale and a diary kept by the investigator. The instrument used to examine differences between the groups in the rating of their own art products was Burkhead's Analytical Visual-Verbal Judgment Scales. Conclusions drawn from the findings were (1) Directive teaching seems superior to nondirective teaching in helping participants relate to subject matter; (2) nondirective teaching seems superior in promoting growth in self-concept and self-confidence; (3) teaching styles apparently do not affect the quality of the art product; (4) adult education techniques can be successfully applied to the teaching of elementary art methods courses.

- 71 EFFECT OF CHALLENGING AND SUPPORTIVE INSTRUCTIONS ON VERBAL LEARNING IN OLDER PERSONS. Ross, Edith. Columbia Univ., 67-14,087, MF \$3.00, HC \$3.00, 99p., 67.

Sixty young men between 18 and 26 years of age and 60 within the 65-75 year age range, matched for verbal ability and socioeconomic status, were given two paired associate learning tasks differing in level of difficulty under neutral, supportive, and challenging instructions. Older persons revealed a greater performance decrement on the more difficult tasks than did the younger group; they did least well on the acquisition phase of learning under challenging instructions and best under the supportive treatment. No differential effects of instructions on relearning was found. The difference between young and old in number of trials needed to master the material under the supportive condition was significantly smaller than under the challenging one. The effects of feelings of inadequacy aroused by the ego-involving instructions on the difficult task were discussed in relation to their interference with the performance of the older persons.

- 72 VERBAL PAIRED-ASSOCIATE LEARNING AS A FUNCTION OF LEVEL OF RESPONSE PRETRAINING AND COMPLEXITY OF BACKGROUND CUES IN TRAINING AND PRETRAINING Wilson, Frederick Stewart. Toronto Univ., 64-11,279, MF \$2.75, HC \$7.20, 155p., 64.

In this research study on verbal paired associate (VPA) learning, two degrees of response pretraining (mastery and 100% overlearning) and three types of auditory and visual background were covaried. Subjects (90 females divided into 18 subgroups) spelled unfamiliar trigrams aloud upon visual presentation until they reached the required retention criterion in successive free recall tests. Pretrained response trigrams were then paired with the stimulus words to make the "familiar" (F) VPA items. An equal number of "nonfamiliar" (NF) VPA items were mixed with the F items to form the final VPA list. Backgrounds were "reduced" (RBC), involving darkness and silence; "constant" (CBC), 12 hues and 12 pure tones presented simultaneously and continuously; and "variable" (VBC), in which the same hues and tones were presented in shifting sequences. Analysis of data revealed that item familiarity, level of pretraining, and pretraining background were the main determinants of VPA performance. CBC was consistently the best training condition. VPA background influenced only the acquisition of the NF items.

- 73 AN EVALUATION OF LEVEL OF ASPIRATION AS A TRAINING PROCEDURE. Fryer, Forrest W. Maryland State Univ., 63-5663, MF \$2.75, HC \$6.00, 103p.,64.

A study was made to determine whether the incorporation of level of aspiration into a training procedure would enhance acquisition of skill in receiving International Morse Code, utilizing the voice-code method of instruction. In the main study, 100 male college students were assigned to ten treatment cells of a 2x2x2 factorial design (with two fractionated groups for knowledge of results). The three main treatment effects investigated by analysis of covariance were differing instructions (solicitation of levels of aspiration in terms of scores expected and scores hoped for); method of expressing the level of aspiration (confidentially versus publicly); and difficulty of materials. Two main treatment effects (instruction and difficulty) and one interaction (expression times difficulty) were statistically significant. "Expect" instruction produced a smaller average goal discrepancy than "hope" instruction; and groups exposed to high difficulty code characters had lower average goal discrepancies than groups exposed to low difficulty characters. The level of aspiration group scored higher than the knowledge of results group, especially with higher difficulty code characters. However, neither instruction nor modes of expression had any significant effect on performance.

- 74 DIFFERENTIALLY STRUCTURED INTRODUCTORY LEARNING MATERIALS AND LEARNING TASKS. Grotelueschen, Arden. Columbia Univ., MF \$1.00, HC \$10.04, 251p.,67.

An attempt was made to assess the effects on adult learning of differentially structured introductory cognitive learning tasks and materials, and the interaction of intelligence with the experimentally manipulated material and task categories. About 96 adults who were unfamiliar with the concept of number bases were classified according to a 4x3x4 factorial design. During individual sessions, the learner, classified by intelligence level, was given a programed booklet on one of four structural learning materials randomly assigned. Upon completion, the learner was given a learning task, by teaching machine, under an experimental condition consisting of three differentially sequenced sets of paired associates, corresponding to numbers in the base four number system. The number of trials required, total errors, and posttest scores served as measures of the effectiveness of the experimental conditions. Intelligence was positively related to task performance, complete task sequencing led to more rapid learning than did partial sequencing, introductory materials were especially useful with the more intelligent adults, completely sequenced learning tasks were evidently most beneficial with the less intelligent adults, and men consistently outperformed women, particularly in applying number based principles.

See also: Item 255 effects of various classroom procedures and materials in adult basic education; 259 effectiveness of three teaching styles in adult basic education; 414 freedom of expression and participant involvement in mental health program; 219 effect of instructional conditions on art participation of older persons; 257 phonic reading methods in literacy education; 277 cloze procedure for assessing reading comprehension

2730 LECTURE

- 75 A STUDY OF THE EFFECTIVENESS OF LECTURE VERSUS CONFERENCE TEACHING TECHNIQUES IN ADULT LEARNING. Butler, John Lonnie. New York Univ., 65-7286, MF \$3.00, HC \$5.80, 120p., 65.

This study evaluated lecture and conference (group discussion) techniques as means of teaching human relations to business executives of comparable age, personality, intelligence, persuasive and social service occupational interests, and job level responsibility. Sixty-one subjects were taught by lecture, 60 by the conference method. All were tested by the Supervisory Inventory on Human Relations before the course, immediately after, and six months later. Conference subjects had higher posttest and followup scores on knowledge gain and on retention. Within the constraints of this experiment, it was concluded that conference (group discussion) teaching surpasses the lecture method when the criterion is retention of human relations information, and when both methods receive equal time.

2750 CIRCULARS, MAILED MATERIAL

- *76 THE EFFECT OF MAILED MATERIAL ON VOLUNTEERS IN A COMMUNITY SERVICE ORGANIZATION. Plotnick, Morton. Michigan State Univ., 65-717, MF \$2.75, HC \$6.00, 123p., 64.

The purpose of this study was to investigate the effect, educationally and attitudinally, of materials mailed by a community service agency to its volunteers. After developing general and operational hypothesis the author screened organizations to determine which would be best suited for this type of study; randomly divided sixty volunteers from B'nai B'rith groups in the Detroit metropolitan area, into experimental and control groups; and developed an instrument that would test the hypothesis of this research, after which the author devised an experimental set of educative mailings, using the material that formed the basis of the questionnaire. The five pieces of experimental mail were sent to the experimental groups at regular intervals from January, 1962 through April, 1963. The data collected indicated that the total change from the first to the second questionnaire of the experimental group showed a change of 20.66%, while the control group showed a change of 24.65%.

2760 INTERNSHIP

- 77 AN ANALYSIS OF THE 1963-64 NATIONAL ASSOCIATION OF SECONDARY-SCHOOL PRINCIPALS' ADMINISTRATIVE INTERNSHIP AND ITS IMPLICATION FOR THE INTERNSHIP IN EDUCATIONAL ADMINISTRATION. McGrew, Jean Byron. Northwestern Univ., 67-4248, MF \$4.60, HC \$16.20, 357p., 66.

The primary purposes of this study were: (1) to establish, through a detailed examination of the professional literature, a set of criteria for those practices considered to be desirable to the operation of an administrative internship; (2) to collect data through a case study of the 1963-64 NASSP administrative internship; and (3) to examine those data in terms of the established criteria. The sources of data included books, articles in professional journals, dissertations, personal interview of interns, written material and evaluations on file in the NASSP offices in Washington D.C., and questionnaires sent to the school officials designated by the interns as the persons most responsible for hiring them. Opinion in the professional literature allowed for the development of nine criteria in three broad categories: the relationship of the internship to the university, university supervision of internship, and internship experiences in the cooperating school. The data showed that the criteria were most successfully met in those areas in which the cooperating schools held the major responsibility and least successfully met where the cooperating universities held it. Universities preparing educational administrators have become increasingly interested in the administrative internship but are divided and uncertain about their proper role.

2770 INDEPENDENT STUDY

- *78 THE TEACHING TASKS PERFORMED BY ADULT SELF-TEACHERS. Tough, Allen M. Chicago Univ., 180p., 65.

The study investigated the behavior of 40 adults while planning, conducting, and supervising their own learning. Those interviewed recalled that they performed for themselves several major tasks of the professional educator. Deciding on activities, obtaining resources, estimating performance levels, choosing goals, deciding when to learn, and dealing with difficult parts were the most common tasks. These tasks required much time and caused some difficulty and concern. The typical self-teacher received help on six of the nine tasks performed, and from many individuals (ranging from four to 31, mean 10.6). Resource persons were of various types, with friends, family and colleagues most common and librarians least common. The relative importance of the various types of helpers varied according to the task.

2780 PROGRAMMED INSTRUCTION

- 79 THE ROLE OF PROGRAMED INSTRUCTION IN COMPANY TRAINING AND DEVELOPMENT PROGRAMS. Pressley, Trezzie Abram. Arkansas Univ., 66-7059, MF \$3.00, HC \$8.80, 195p., 66.

Data were obtained from responses received from 104 companies which were using programed instruction in their training programs and from 176 employees within these companies. Companies of all sizes were using programed instruction; however, the vast majority had used programed materials

with one-half or less of their employees. Also 3/4 of the companies were using the method in training new workers and almost half were using it in retraining the work force in new job areas. Most were using programs in text form; half had developed their own programs; others were purchased. Company studies showed that programmed instruction has the advantages of greater retention by the learner, training time saved, and lower training costs. Both employers and employees were very favorable toward the use of programmed instruction.

- 80 AN EXPERIMENTAL DEVELOPMENT OF PROGRAMMED INSTRUCTIONAL MATERIAL FOR THE VOCATIONAL EDUCATION DEPARTMENT OF THE TEXAS DEPARTMENT OF CORRECTIONS. Bertrand, Clint Albert. Texas A & M Univ., 65-1490, MF \$5.30, HC \$18.70, Ed. D. thesis, 414p., 64.

To test the feasibility of conducting programmed instruction through the Texas Department of Correction, various types of programs and presentation devices were used. The project involved training inmate programmers, writing programs in three subject areas (electricity, barbering, vocational guidance), experimenting with programmed materials, testing experimental groups for learning gains, analyzing variance in test scores, and sampling inmates' attitudes toward programmed instruction. Findings included the following: (1) when used in a cell, teaching machine presentations were better than programmed books; (2) in class rooms, book presentations were superior to teaching machines; (3) written responses to linear forms in either linear or combination linear branched programs were no better than thought responses and linear programs were not better than branched in covering subject fundamentals; (4) 78% of inmates favored programmed over conventional instruction, and 90% approved of the format. Inmates wanted many more such courses made available, especially in such subject areas as mathematics, electricity, and auto mechanics.

- 81 STRUCTURAL PARAMETERS OF AN AUTOINSTRUCTIONAL EXPERIMENT INVOLVING ADULT LEARNERS. Kearney, Patricia Ann. Western Reserve Univ., 67-4611, MF \$3.00, HC \$6.60, 140p., 66.

A study was made of the effects of programmed instruction versus the use of course objectives and reference materials on learning, transfer, and attitudes in two adult experimental groups. The subject was mathematical concepts basic to introductory statistics. Mathematical tests and attitude scales were administered before and after the experiment. Group 1 (programmed instruction) learned more despite significant gains by all, but the two groups did not differ significantly on transfer or on time spent. Correlations were significant in both groups between initial scores and mathematical task attitudes, and between posttest scores and terminal attitudes toward the study of statistics. For Group 1, but not Group 2, correlations between initial task attitudes and initial performance declined during the experiment, initial attitudes toward statistics correlated strongly with pretest scores, and attitudes toward experimental treatments correlated strongly with terminal attitudes toward statistics. No significant attitude changes were found toward tasks or statistics.

- 82 THE EFFECTIVENESS OF TWO DIFFERENT USES OF AN AUTOINSTRUCTIONAL PROGRAM TO TEACH THE USE OF THE AIR FORCE FISCAL ACCOUNT STRUCTURE AND CODES. Askins, Billy Earl. North Texas State Univ., 76-15,013, MF \$3.00, HC \$9.00, Ed. D. thesis, 198p., 67.

The problem of the study was the effectiveness of three teaching techniques--lecture-demonstration procedure supplemented with the programed textbook, autoinstructional procedure using only the programed textbook, and the conventional lecture-demonstration procedure. The control-experimental group method was used to collect the data from 110 regular Air Force male students who received a pre-test at the beginning of the course, a posttest at the end, and a retention test five weeks after the posttest. It was found that students taught with the lecture-demonstration procedure supplemented with the programed textbook made a significantly higher mean gain score than students taught either with the auto-instructional or conventional lecture-demonstration procedure. Students taught solely with the autoinstructional procedure required significantly less time to complete the unit than students taught with the other two techniques. No significant differences were found among the retention loss scores of the three groups nor between the student's mean gain score and his reading ability, general intelligence, and educational level.

- 83 AN APPRAISAL OF THE APPROPRIATENESS AND EFFECTIVENESS OF PROGRAMED INSTRUCTION FOR TRAINING ADULT LEADERSHIP IN SOUTHERN BAPTIST CHURCHES. Orr, Robert Alvin. Southern Baptist Theological Seminary, 66-7387, MF \$3.95, HC \$13.95, D.R.E. thesis, 308p., 66.

The purpose of this study was to investigate the nature and use of programed instruction and its appropriateness in Christian education among Southern Baptists, to prepare and test programed materials for church leadership training, and to assess the values of programed instruction for such training. Library research and a survey were used to investigate the nature and use of programed instruction. An experimental and a control group of 23 adults each, matched by formal education, intelligence, and initial knowledge, were given a content test, which served as the pretest, the immediate posttest, and the delayed posttest. Programed instruction has shown its ability to decrease training time, improve performance, allow more flexibility of schedule, and/or help deal with shortages of trained instructors. Acceptance by trainers and trainees has been generally favorable; results of limited trials in church groups have been generally encouraging. In this experiment, the experimental group showed significantly more gain on the immediate posttest, but only slightly more on the delayed posttest, than the control (conventional text) group. Formal education and intelligence were the only variables significantly and positively correlated with cognitive gain. Suggestions on further development and testing were offered.

See also: Item 244 programmed learning in Braille; 74 interaction of intelligence with variously sequenced learning materials

2900 DISCUSSION

- *84 THE UTILIZATION OF AN ADULT EDUCATION PROGRAM OF GROUP DISCUSSION WITH PARTICIPATION TRAINING TO MEET SELECTED NEEDS OF AGED PERSONS. Miller, Charles Edward. Indiana Univ., 64-5472, MF \$3.00, HC \$6.60, 140p., 63.

The purpose of this study was to determine the extent to which adult education programs of participation training could supply selected members of a senior citizens' association with increased feelings of self-satisfaction and willingness and ability to communicate feelings, opinions, and attitudes with others. Twenty-one one-hour sessions of group discussion were conducted to activate freedom of expression, voluntary participation, sharing in program development, and training in responsibilities of discussion teamwork. Through observations, completion of an end-of-experiment participant's appraisal form, and Bills' Index of Adjustment Values, data were collected from 15 participants (Group A) who were between the ages of 66 and 74 and 15 who were between the ages of 75 and 83. The subjective data were grouped according to similar responses and observations and self-satisfaction exhibited by the combined groups was significant; however, the gain for individual groups was not. Subjective data showed participants were more willing and better able to communicate their feelings, opinions, and attitudes.

- *85 A COMPARISON OF KNOWLEDGE GAINED BY ADULTS WHEN PRESENTATIONS ARE FOLLOWED BY DISCUSSION LED BY LOCAL VOLUNTEER AND PROFESSIONAL LEADERS WITH A POSITIVE OR NEGATIVE ATTITUDE TOWARD THE DISCUSSION TASK. Busset, Glenn Morton. Wisconsin Univ., 65-10,585, MF \$3.00, HC \$7.00, 149p., 65.

This study examined whether or not the knowledge gained by adults in a group is influenced by media employed, by discussion, and by attitudes of local and professional discussion leaders. Research results were presented to the adults (250 4-H Club leaders) by film, lecture, and bulletin, then by discussion. Phases of the project included the effect of a period of followup discussion on knowledge gained by use of three media, and the relative effectiveness of local and professional leaders. Hypotheses were tested by analysis of variance. The lecture method, when followed by discussion, was most effective; films ranked second; bulletins, third. Attitudes of local discussion leaders affected knowledge gains relatively little in the settings described. It was concluded that adults expect an interested, positive attitude on the part of professional educators. When adults perceive an attitude which they interpret as uninterested or negative, learning significantly decreases.

- *86 A STUDY OF DELAYED ACHIEVEMENT IN A SHORT-TERM ADULT EDUCATION PROGRAM. Steffer, Robert Wesley. Indiana Univ., 68-2365, MF \$3.00, HC \$7.60, 164p., 67.

This study aimed at measuring and evaluating the results of a participation training program after one year had elapsed. Two experimental groups were administered a test of delayed achievement twice; one received a 15-minute treatment-review on the principles of participation training in group discussion between the test administrations; the other took the test a second time after a 15-minute interval, receiving no treatment. The third group, an inside control group, was composed of individuals active in church adult education classes; the fourth and fifth groups were inside and outside groups composed of persons not active in adult education groups. Those with training and some randomly-selected, untrained representatives of adult education groups were interviewed. The findings revealed that trained adults achieved significantly higher scores on the delayed achievement test than non-trained adults; test scores of non-trained adults were significantly higher on the delayed achievement test than those of non-trained adults; post-test scores of the group receiving the treatment-review differed significantly from the post-test scores of the group not receiving the treatment-review.

- 87 A COMPARISON OF THE EFFECTIVENESS OF BULLETIN, FILM, AND LECTURE, WITH AND WITHOUT DISCUSSION, IN PRESENTING RESEARCH INFORMATION. Eyestone, Merle Linton. Wisconsin Univ., 66-5904, MF \$3.00, HC \$9.00, Ed.D. thesis, 198p., 66.

A five-by-three factorial analysis of variance was used in this study designed to help determine the differences, if any, in the effectiveness of selected media, with and without discussion periods, in adult learning situations. The five-level factors were represented by five different media treatments: bulletin alone, film alone, film plus bulletin, lecture alone, and lecture plus bulletin. The three-level factors were three discussion treatments: no discussion, local-leader-led discussion, and professional-leader-led discussion. Data were secured from 513 participants. Knowledge gained was measured by the Generalized Item Test Analysis (GITAP) by Baker; attitude and opinion scores were computed by the method of Reciprocal Averages for Scaling of Inventories and Questionnaires by Ragsdale and Baker. There is no statistical advantage in terms of knowledge gained in choosing one particular medium in presenting 4-H research findings, to 4-H leader groups. Participants will gain more knowledge if no discussion is held than if a 20-minute discussion is allowed following presentation, irrespective of the medium used. A mathematical difference between mean scores of participants occurs when an analysis of the mean scores is made by using each of the classificatory variables of interest in this study.

- 88 A DEMONSTRATION PROJECT ON FERTILITY CONTROL. Edwards Olivia Corbett; Ring, Abraham Eric. Columbia Univ., 65-6161, MF \$3.00, HC \$6.40, Ed.D. thesis, 132p., 64.

The purpose of this demonstration project was to determine whether the small group discussion method could effect a change in the contraceptive behavior patterns of working class Negro mothers. Additional objectives of the study were to develop effective recruitment and retainment procedures for this target population and to identify specific barriers to purposive family planning. Data were collected during home visits, group meetings, and in the follow-up home interviews. The salient factor in movement toward effective contraceptive practices proved to be a pre-existing readiness for change. All of the respondents were non-contraceptors before the group discussions took place and, following the group meetings, 74% of the women reported some positive change in contraceptive behavior. Recruitment and group leadership aspects of the project demonstrated that the target population was capable of coming to organized group meetings and of sharing freely around a most intimate topic, although it was generally assumed by the professional population that Negro women of this socio-economic class (a) would not participate; (b) would not be able to discuss such material; and (c) were not capable of effecting any changes.

- *89 A SHORT-TERM ADULT PROGRAM EXPERIMENT IN A CORRECTIONAL INSTITUTION. Zeller, Earnest Jerome. Indiana Univ., 66-14,909, MF \$3.00, HC \$7.40, 156p, 66.

A study was made of behavior changes in two experimental groups of literate prisoners of the Indiana State Reformatory as a result of a short-term participation training program. Subjects were participants and nonparticipants in a traditional correctional education program. Behavioral criteria were self-control, self-confidence, responsible participation, sociability, trust in others, curiosity, considered judgments, and task accomplishment. Experimental educational subjects received seven three-hour training sessions within two weeks. Four randomly chosen groups of 15 were formed: Educational Experimental (EE), Educational Control (EC), Noneducational Experimental (NE), and Non-educational Control (NC). A leaderless discussion rating form, a self-evaluation form, and two personality measures were used; and a session log was kept. Significant growth trends were found, especially in the rate of acceleration in learning. Gains were perceived by experimental subjects in participation, trust, and curiosity; Group EE added self-confidence; Group NE added sociability. Trends appeared to indicate loss for Group EE, stability for Groups EC and NC, and gains for Group NE. Conclusions were stated regarding participant characteristics and uses of participant training. (Included are appendixes, 13 tables, and 37 references.)

- *90 SELF CONCEPT CHANGES AMONG ALCOHOLIC PATIENTS IN MADISON (INDIANA) STATE HOSPITAL RESULTING FROM PARTICIPATION TRAINING IN GROUP DISCUSSION. Shay, Earl R., Indiana Univ., 64-1690, MF \$2.85, HC \$9.90, Ed.D. thesis, 219p., 63.

To investigate the therapeutic effects on the self concept of participation training in group discussion, 18 institutionalized male alcoholics (average age 42.5 years, school grade achievement 11.2 years) underwent three hour sessions of group discussion during 12 days in

February 1963, following a control period of 11.8 days. The Butler-Haigh Q-sort was administered at the beginning of the control and training periods. Rating scales were filled out by the investigator, four nurses, and the subjects themselves. Increased integration of personality (measured by the Index of Self-Regard Scores) and adjustment of personality (measured by the Index of Self-Regard Scores) and adjustment of personality (measured by the Q-Adjustment Scores) occurred during the training period. Only integrative changes took place during the control period. Ratings of persons associating with the patients were more congruent with changes in the integration scores, while the self-ratings were more congruent with the changes in adjustment scores. The data indicate that training contributes to integrative and adjustive changes in the self concept and is therefore therapeutic. Changes in the integration of the patient produce behavioral changes apparent to other persons, while changes in the adjustment of the patient produces changes apparent to subjects themselves.

See also: SECTION 2920 HUMAN RELATIONS, LABORATORY TRAINING: Item 423 parent discussion in YMCA; 400 peace discussion manual; 399a group discussion on practical politics for oil company employees; 397 liberal education discussion groups in Wyoming; 218 effects of discussion groups in home for aged; 75 lecture versus discussion in executive development; 240 learning by discussion among mental retardates

2920 HUMAN RELATIONS, LABORATORY TRAINING

- *91 THE EFFECTS OF PARTICIPATION TRAINING ON CLOSED-MINDEDNESS, ANXIETY, AND SELF-CONCEPT. Imbler, Irene Iris. Indiana Univ., 68-2305, MF \$3.00, HC \$6.40, 134p., 67.

Small group discussion, to train members to work as a learning team, was used to investigate changes in closed-mindedness, anxiety, and self concept. Seventeen male labor union members enrolled in a 12-week residential labor education program at Indiana University were divided between an experimental group in a 14-session course and a control group attending regular labor education classes. An additional control group received no treatment. The Rokeach Dogmatism Scale, Taylor Manifest Anxiety Scale, and Butler-Haigh Q Sort were administered to all groups before and after the program. Results indicated that no significant differences in characteristics existed after the treatment period; change in the predicted direction occurred in the experimental group on all three criteria, and in anxiety for the first control group. No significant positive correlation emerged between closed-mindedness and anxiety; but a negative correlation did exist between closed-mindedness and anxiety and a positive self concept.

- *92 A STUDY OF WORK AND EMOTIONALITY IN A SMALL ADULT INSTRUCTIONAL GROUP. Portal-Foster, Charles William George. Wisconsin Univ., 66-9955, MF \$3.00, HC \$9.70, 212p., 66.

Objectives of the study were to investigate relationships between and among qualities of emotion and types of levels of work orientation in small adult instructional group interaction; to discern relationships

and/or behavior patterns which would be tested under laboratory conditions; and to test the consistency and utility of the Work-Emotionality Theory, which posits six emotionality types (fight, flight, dependency, counterdependency, pairing, counterpairing) and four work orientations. Subjects were 16 nursery school teachers who met for eight two-hour sessions. Data were obtained by a Q-sort administered at the first and last sessions. It was concluded that participation patterns can be predicted with Q-sort data; that group members tend to react to dynamic leadership as a unit regardless of individual tendencies; that members vary their use of emotionalities in an effort to establish their ideal group culture; that exposure to a group culture is not indicative of one's accuracy in perceiving that culture; and that the Q-sort technique, the Work-Emotionality Theory, and the analysis of case study data are all useful in the study of adult learning processes. (Included are 84 tables and figures and 63 references.)

- 93 EFFECTS OF T-GROUP TRAINING AND COGNITIVE LEARNING ON SMALL GROUP EFFECTIVENESS. Tolela, Michele. Denver Univ., 68-3,639, MF \$3.00, HC \$6.80, 144p., 67.

A study was made to determine whether learning achieved in a T-group experience is transferred to a problem-solving situation, and to identify possible factors in the training process that enhance transfer of training. Problem-solving was measured along several dimensions, including quality of solution offered, degree of acceptance each member gave to a group solution, cohesiveness of groups, degree of status consensus within groups, perceived amounts of conflict within groups, and interaction rates. Experimental subjects were exposed to T-group training with or without theoretical lectures; control subjects were not exposed to T-group training. There was also a problem-solving session in which all groups participated. Data were gathered by means of a postsession questionnaire, interaction observations, and solution analysis. Results of analysis of variance indicated that T-group training does produce behavioral changes in trainees and that such changes can be transferred to another situation; but the view that cognitive learning enhances transfer was not supported. It is possible, however, that the lectures were not long enough to have a measurable effect. (Illustrations, appendixes, and 88 references are included.)

- *94 THE DYNAMICS OF EXPECTATIONS AND ADAPTATION TO ADULT LEARNING GROUP CULTURE. Watson, Eugene Ray. Wisconsin Univ., 64-3249, MF \$2.75, HC \$8.40, 184p., 64.

A study was made of interrelationships of group member's ideal and predictive expectations for culture, perception of culture, satisfaction, and adaptation to the culture of an interacting adult learning group. This required determining whether hypotheses can be formed and tested with "natural" adult learning groups, using the work and emotionality concepts of Bion and Thelen. The combined work-

emotionality categories (six emotional modalities and four levels of group work) proved applicable. Group members had ideal and predictive expectations, which might differ on occasion. These expectations seemed more closely related to participant satisfaction. What appeared to be distorted perceptions of culture expressed by some members may have been defense mechanisms or a phase of regressive adaptation. Adaptation to group culture did not always depend on satisfaction with it. In task-oriented groups, no clear distinction could be drawn between conformity and adaptation.

- 95 THE EFFECT OF A TEAM HUMAN RELATIONS TRAINING LABORATORY ON THE PRODUCTIVITY AND PERCEPTIONS OF A SELLING GROUP. Zenger, John Hancock. University of Southern California. 68-5887, MF \$3.00, HC \$8.00, D. B. A. thesis, 176p., 67.

Objectives of this study were to establish that the climate and behavior in work groups can be changed, assess the relationship between productivity and perceptions in such groups, and evaluate the use of team training in bringing about change relating to organizational goals. The two-year study used experimental and control groups of insurance agents, together with supervisors and other managerial personnel. Conventional training was applied to one control group to counteract the Hawthorne effect. Experimental training included three-day training laboratories and followup sessions involving agents, first-line managers, and their superiors. Measurements of productivity were made before, during, and at the end of the experiment. Agents' incomes increased and the organizational unit rose in overall company rankings as a result of training. Positive changes in perceptions of one's superiors and one's peer group were produced also. General conclusions include the following: (1) the experimental procedures contributed to increased productivity; (2) training laboratories involving the lowest level of the organization had greater impact than those with management only; (3) team-training laboratories resulted in a general overall positive change in perceptions.

- *96 EGO-STAGE DEVELOPMENT AND INTERACTION. Fay, Francis Anderson. Wisconsin Univ., 67-10,935, MF \$3.00, HC \$10.35, 226p., 67.

The principal aim of the study was to determine whether, in the verbal interaction in a group of nine adults engaged in adult education, a systematic relationship could be shown between members' ego-stage profiles and their patterns of participation. Active ego-stage profiles were constructed of basic ego identity concerns using Erikson's conception of psychological development through the life span. The general hypothesis asserted that congruence or noncongruence between individual and group ego-stage profiles would be systematically reflected in behavior patterns categorized in terms of work and emotion. Patterns of verbal interaction were derived from categories of interaction data in the form

of six emotions and four levels of work. Tape recordings of interaction in four sessions provided five samples of data; the utterances were then rated for work levels and emotionality. Twelve tests yielded measures of association which were rejected as statistically insignificant, but the feasibility of studying the impact of ego identity concerns on individual behavior was demonstrated.

- *97 AN EXPLORATORY ADULT EDUCATION PROGRAM FOR PARENTS AND THEIR CHILDREN OF SENIOR HIGH AGE TO IMPROVE COMMUNICATION IN THE HOME. Jackson, Norman Wentworth. Indiana Univ., 65-395, MF \$2.75, HC \$9.00, Ed. D. thesis, 197p., 64.

With groups each containing three teen-aged boys, three teen-aged girls, and one or both parents of these, this study tested three time patterns of group life which used participation training in group discussion to determine which was best for improving communication between parents and teen-aged offspring. The time patterns were as follows: group 1 had a weekend retreat for six sessions; group 2 met twice weekly for six weeks; and group 3 met once weekly for twelve weeks. The sought-for outcomes were translated into behavioral terms based on sensitivity, acceptance, and freedom of expression; and a questionnaire was used to obtain the subjects' perceptions of how well they understood and communicated with one another and how accepting and supporting the climate of their conversations at home was. In only one instance did the data reach significant levels of confidence. At the end of the project, youths in groups 1 and 2 showed greater change than the adults, but the difference did not reach a significant level. Groups 1 and 2 registered interpersonal change; group 3 did not.

- 98 EFFECTS OF HUMAN RELATIONS LABORATORY TRAINING ON FLEXIBILITY AND ATTITUDES TOWARD SUPERVISION. Bringle, Ronald Royce. Oregon Univ., 68-3973, MF \$3.00, HC \$7.00, 149p., 67.

The problem of this study was to assess the effects of a three-day residential human relations laboratory on flexibility and supervisory attitudes. An instrument constructed by Felker and Smith designed to further 'operationalize' the construct of philosophic-mindedness was used to measure flexibility. Supervisory attitudes were measured by an instrument (entitled Managerial Values) developed by Scientific Methods, Inc. It was hypothesized that flexibility would be increased by human relations training; also that 9/9 attitudes toward supervision would be increased. Both hypotheses were supported. Differences between means on flexibility and 9/9 attitudes at times 1, 2, and 3, were significant at the .01 level for the experimental group while there were no significant differences between means for the quasi-control group. Flexibility scores for administrators in this study were compared with scores by philosophy of education students as reported by Smith and Felker.

- *99 A STUDY OF TWO GROUP DISCUSSION PROCEDURES FOR CHANGING ACCEPTANCE OF SELF AND OTHERS. Partin, James Jennings. Indiana Univ., 68-2340, MF \$3.00, HC \$7.20, 154p., 67.

The primary purpose of this study was to determine the effects of two experimental training programs for mental hospital attendants; a secondary purpose was to determine the relationship between acceptance and neuroticism. The subjects were 39 adult attendant employees at a state institution for the mentally retarded. Subjects who volunteered were randomly assigned, in equal numbers, to two experimental groups and a control group. Treatment groups met twice weekly for 6 weeks for a total of 12 sessions of training in developing therapeutic interpersonal relationships on a one-to-one basis and in groups. The treatments differed in that one group discussed prescribed topics and the other chose its topics. Data were gathered through a pre- and post-test battery of tests, consisting of the Acceptance Attitude Scale (developed for the study), the Fey Questionnaire, and the IPAT Neuroticism Scale Questionnaire. The findings indicated that acceptance of self was more difficult to change than acceptance of others. There were no differences of means significant at the .20 level between experimental and control groups.

- *100 THE EFFECT OF PARTICIPATION TRAINING ON THE SELF-SYSTEM. Castle, David. Indiana Univ., 65-10,807, MF \$3.00, HC \$10.15, 225p., 65.

The purpose of this study was to measure the degree of behavioral change in terms of some aspects of the psychological self resulting from participation training of groups from two churches. Attempt is made to describe and measure the process of growth in terms of a process model categorized into awareness, acceptance, and affirmation. Content data were gathered by the Semantic Differential Technique which measured changes in the meaning of selected concepts on nine bipolar, adjective scales. The test was given on a pre- and post-test basis. Process was measured by the use of a journal questionnaire which provided information for the three-step process model: frustrations showed up mainly on the conceptual level, whereas rewards of participation were more on the process or experiential level. The participants came to be less afraid of controversy and placed a higher value on tension but were less afraid of it. Adventure and joy became powerful as concepts, communication was improved, and certain philosophical concepts such as death were less feared.

- 101 A STUDY OF THE EFFECTIVENESS OF SENSITIVITY TRAINING IN AN INSERVICE TEACHER-TRAINING PROGRAM IN HUMAN RELATIONS. Lee, Walter Sidney. California Univ., 67-14,312, MF \$3.00, HC \$6.20, Ed.D. thesis, 120p., 67.

To test the effectiveness of sensitivity training in an in-service teacher-training program, this study compared two groups subjected to different experimental treatments and a control group. The subjects were 51 elementary teachers from three school districts in the Los Angeles area. Twenty teachers (ten in each of two T-groups) received ten two-hour sessions of intensive sensitivity training. Ten teachers received ten two-hour classes in the principles of human relations. Twenty-one teachers served as the control group, taking all measuring

instruments, but receiving no human relations training. The groups were compared for effectiveness of training methods on the basis of several psychometric and behavioral criteria. Results showed that teachers who received sensitivity training improved their scores on the attitude inventory scale and increased their self-esteem on the Q-sort instrument significantly more than those in the control group. While there was no significant difference in teacher absenteeism rate between the two groups, the students of teachers who received sensitivity training were absent less often than were the students of teachers in the control group.

- *102 THE RELATIONSHIPS OF GROUP SIZE AND DIVERGENT THINKING AMONG ADULTS. Shah, Filiz B. Florida State Univ., 66-9086, MF \$3.00, HC \$3.00, 58p., 66.

The purposes of this study were to investigate the relationship between group size and factors of divergent production, and to compare real group productivity in divergent thinking tasks. Divergent production was measured by tests prepared by J.P. Guilford and his associates designed to measure four factors of divergent thinking. The majority of the 180 subjects who comprised the sample were over forty years of age and were professionally involved in education. The tests were administered in four sessions and presumably in a relaxed atmosphere. The subjects were tested individually in the first and fourth sessions and in groups of three and five persons in the second and third sessions. The findings indicated that five-person groups produced more ideas on all tests than three-person groups, and that more ideas were produced in the fourth session than in the first. The findings further indicated that the subjects produced more ideas on tests measuring spontaneous flexibility and originality in group situations whereas they produced more ideas on tests measuring associational and ideational fluency in individual situations.

- 103 THE INFLUENCE OF HUMAN RELATIONS LABORATORY TRAINING UPON THE PERCEIVED BEHAVIORAL CHANGES ON SECONDARY SCHOOL SEMINAR INSTRUCTORS. Krafft, Larry John. Michigan State Univ., 68-4165, MF \$3.00, HC \$8.40, 185p., 67.

A study was made to determine if the laboratory training method can help teachers be more effective small group seminar leaders, and be more effective in their interaction with fellow educators. Two seminar instructors were selected from each of 17 secondary schools for the laboratory training; and a similar control group was selected for no treatment. Six months following the ten-day training session, all participants, and a randomly selected team of departmental co-workers and principals, were interviewed. They reported on factors of stability and change. Students in the participants' seminars responded to the Perceived Small Group Seminar Atmosphere Instrument. Participants were found to express feelings and information better; to be more understanding and accepting of suggestions, easier to get along with, willing to experiment; to have more flexible behavior and greater insight into themselves and their roles;

and to be more self-confident and poised in leading discussions. Students led by laboratory trained participants expressed increased satisfaction. It was concluded that the perceived behavioral changes of the laboratory trained participants improved instruction in seminar classes and made an impact on co-workers, teachers, and principals.

- 104 THE APPLICABILITY OF INSTRUCTION ON WORK-EMOTIONALITY CONCEPTS TO GROUP PRODUCTIVITY IN EDUCATIONALLY-ORIENTED DISCUSSION GROUPS. Marin, Ludmilla Ann. Wisconsin Univ., 65-14,910, MF \$3.00, HC \$9.70, 211p., 65.

The study examines the problem that if members of small adult discussion groups had acquired an understanding of work-emotionality concepts of group behavior, the groups in which they subsequently operated would produce a better group product, first by solving the problem of handling interpersonal relationships, and second by accomplishing the group goal more appropriately and effectively than would the control groups. A laboratory group experiment was conducted with two experimental and two control groups composed of six adults each. Instruction on work-emotionality concepts was given to the experimental groups. A group talk session was held prior to the instruction, and five-group task sessions were held after the instruction. All sessions were observed and tape recorded. For purposes of analysis ten group sessions were transcribed, coded, and compared for rate of group productivity changes. The group productivity findings suggest that knowledge of group work-emotionality modes of behavior can be learned by groups through instruction, and that this knowledge promotes the appropriate handling of interpersonal relationships during the group discussion.

- *105 THE EFFECTS OF PARTICIPATION TRAINING ON ADULT LITERACY EDUCATION IN A MENTAL HOSPITAL. Drane, Richard Stephen. Indiana Univ., 67-15,084, MF \$3.00, HC \$6.00, 123p., 67.

This study was made to determine whether or not participation training followed by literacy education would be more effective than literacy education alone. Subjects were 30 patients at Central State Hospital, Indianapolis, institutionalized for over a month, 15-65 years old, with an I.Q. of above 70, a reading level below the 6th grade, and a probability of staying in the hospital for the 14-week study. The Nelson Reading test was administered 4 times. In comparing group mean scores on improvement at 6 weeks, 10 weeks and 4 weeks after the study, no differences were found at the .05 level of significance using Fisher's "t" test. However, there was a slight improvement in the training group over the literacy group for the 3 tests. When participation training replaced literacy instruction for 4 weeks there was at least as much improvement. The relationship of participation training to good mental health practices would justify continued research in these areas, where the relationships formed in and through learning experiences can implement learning. Recommendations for future research include adjusting time allotments, changes in setting and tests, and the use of a control group.

See also: 2900 DISCUSSION; Item 241 participation training of schizophrenics

2950 SIMULATION, GAMING

- 106 AN APPROACH TO MORE EFFECTIVE TRAINING FOR EXECUTIVE CAREERS. Massey, James Orr. Southern California Univ., 68-1688, MF \$3.00, HC \$9.25, D.B.A. thesis, 202p., 67.

An assessment was made of the usefulness of more realistic simulation models in the academic study of business, and of resources needed to develop and use such models. A review of the literature showed significant differences in structure and the role of the "player" (student) as regards game theory, which deals with analysis and selection of available strategies in competitive situations with rationality of behavior assumed; management games, with their deterministic structures in which interactions between decisions and environment are specified by referees; and true simulation, marked by indeterminacy in the relation of student to model and in input-output variables. True simulation has usually proved too costly, but management games presently in use can be modified into simulations for graduate schools of business. In an experiment to test this approach, comparison of student reaction to the original and to the modification indicated improved realism and greater student appreciation of factors in decision-making.

See also: Item 399 case study method in civic education; 63 application of a conceptual scheme to business gaming and case study

3000 CONFERENCES, INSTITUTES, WORKSHOPS

- 107 APPLICATIONAL TRANSFER IN ADULT EDUCATION. Florell, Robert J. Nebraska Univ., 66-11,739, MF \$6.15, HC \$21.85, 475p., 66.

Research was focused on three questions: (1) to what degree participants utilized conference experience, (2) what personal characteristics differentiated conference participants from nonparticipants, and (3) what significant relationship existed between these characteristics and applicational transfer. Data were provided on 665 participants attending seven conferences, and 424 people in comparison groups who were similar in background, age, and opinion. The Personal Characteristics Questionnaire was administered at each conference and mailed to comparison groups, and the Applicational Transfer Questionnaire was mailed to both groups after three months. The Mann Whitney U and Chi Square techniques tested differences, and relationships were tested by the Kendall Rank Correlation Coefficient. The major conclusions were that conference groups were engaged in significantly more activities in line with conference objectives and that applicational transfer resulted from attending short-term conferences. Significant findings in one or more conferences were not conclusive for the total population. These findings suggest further research questions.

- *108 FORMAL CLASS AND WORKSHOP METHODS IN ADULT HIGH SCHOOL CREDIT PROGRAMS. Lehmann, Herbert W. Chicago Univ., 90p., 65.

The purpose of this study was to determine relative effectiveness of formal class and workshop (individual study) methods when used with adults in academic high school courses. Both methods of instruction were employed in the four subject areas (English, social studies, mathematics, and science) included in the study, and constituted approximately 65% of a student's graduation requirements; therefore, the total relative effectiveness of the two methods on this major ratio of the adult high school curriculum was tested to provide information concerning the general effectiveness of the methods. The relative effectiveness of the two methods in each of the four subject areas under consideration was also examined. The formal class method was slightly superior to the workshop method in most tests of the data both for the individual subject areas studied, and also for the total of all areas considered. The workshop method permits a student to complete a semester's work in a subject area in considerably less time than the 18 weeks attendance required by the formal class method.

See also: SECTION 2300 RESIDENTIAL EDUCATION

3020 SHORT COURSES

- 109 AN EVALUATION OF THE FARM SHORT COURSES AT THE UNIVERSITY OF WISCONSIN. Gasmin, Osman Abul. Wisconsin Univ., 66-13,790, MF \$3.00, HC \$10.35, 230p., 66.

An evaluation of a Farm Short Course was made in terms of its effects on the enrollees in certain behavioral dimensions and its processes as appraised by the participants. The study population comprised an experimental group of the 203 enrollees for the 1965-66 session and a control group of 61 comparable rural youth. Data were collected on a pre-test-post test basis, using the questionnaire method. No significant difference was found between the enrollees' pretest and post test responses in regard to educational aspiration; occupational orientation; satisfaction with present education and occupation, the farm, and the community; rural life preference, innovative proneness, and economic motivation. However, a significant difference was found in regard to primary group preference, satisfaction with the home, and knowledge in selected subject matter areas; all differences were positive. Significant positive relationship was found between individual shifts in occupational orientations and educational aspiration, while no relationship was found in value orientations and individual shifts in occupational orientations. Course weaknesses were revealed in subject areas of agricultural economics, rural sociology, and soils and some deficiencies were revealed in enrollees' social relations on campus.

- *110 THE INFLUENCE OF AN EDUCATIONAL AWARENESS EXPERIENCE ON COMPONENTS OF PSYCHOLOGICAL POSITION TOWARD AN ISSUE IN CONSERVATION: A METHODOLOGICAL STUDY. Dice, Eugene Frederick. Michigan Univ., 65-10,943, MF \$3.00, HC \$9.25, Ed.D. thesis, 201p., 65.

A study was made of the influence of a planned sequence of educational events on components of hunters' pro and con positions on a conservation issue: landowner rights versus the right or privilege to hunt wild game on private land belonging to someone else. Components were the individual's level of critical thinking, general feeling toward the issue, disposition to act, and perception of facts and of appropriate action. Criteria were score changes on attitudes and knowledge from pretest to posttest for an experimental and a control group. The experimental group of leaders in hunting organizations attended a three session, five week training school on the legal and historical aspects of hunting. Conservation experts served as source lecturers, and there was discussion with the experts and in small groups. Experimental and control subjects were largely alike on the pretest, but the former showed significant changes on all variables at the posttest. Results suggest that the activity is of use in planning adult education programs on community and resource development. The issue itself represents a test model for many other natural resource issues.

- 111 THE EFFECTIVENESS OF THE IN-DEPTH TEACHING APPROACH AS UTILIZED BY THE COOPERATIVE EXTENSION SERVICE OF WISCONSIN. Asmar, Samir S. Wisconsin Univ., 66-13,760, MF \$3.15, HC \$11.05, 244p., 66.

A study was made in Wisconsin of knowledge gains by participants in two Cooperative Extension Service educational activities (soil management and cooking for many) organized and presented by the in-depth teaching approach, and of selected factors thought to have an effect on the amount of knowledge gained. Gains were categorized as low (1%-49% above pretest scores) and high (50% or more above pretest scores). The independent variables were personal characteristics (including age, sex, and income), size or learning groups, expressed reasons for participation, extent of participation in various educational activities, participant satisfaction, and the extent of reading in the recommended texts. In the soil management clinic, knowledge gains by persons with little previous knowledge were significantly related to satisfaction with the instructor's handling of the course. However, no significant relationship was found in the soil management clinic or the cooking clinic between knowledge gains and the independent variables. Conclusions were stated on program planning and on the implications of participant characteristics, motivation, and satisfaction.

- *112 ADOPTION OF PRACTICES FOLLOWING AN ADULT EDUCATION PROGRAM IN NUTRITION. Dickson, Anita. Indiana Univ., 67-4007, MF \$3.00, HC \$7.50, Ed.D. thesis, 170p., 66.

This study investigated the adoption and use of practices in preparation and use of vegetables following adult classes in nutrition. Data on 63 Brazilian women were obtained through interviews, diet-intake records, a pretest in nutrition, and a food-belief inventory, and practices were compared on prior use, adoption, combined use, rejection, and the percent adoption of available practices. The use of all practices increased, with 89% adoption of principles of food preparation. Economic advantage, relative advantage, and compatibility were positively related to use; complexity was negatively related. Adoption and use bore little relationship to age, income, education, prior knowledge of nutrition, present adequacy of diet, or food beliefs. The major conclusions were that a short series of nutrition classes can effectively influence the adoption of practices and that the practices most readily adopted are based on principles of food preparation; have a nutritional advantage; and are applicable in more than one situation. Expansion of similar short courses was recommended along with special efforts to reach very low-income groups.

3050 DEMONSTRATION

- 113 FACTORS ASSOCIATED WITH EFFECTIVENESS OF THE RESULT DEMONSTRATION METHOD IN PROMOTING ADOPTION OF FERTILIZER PRACTICES BY WHEAT FARMERS IN BAALBECK AND AKKAR COUNTIES, LEBANON. Maalouf, Wajih Darweesh. Cornell Univ., 66-4383, MF \$3.00, HC \$9.25, 201p., 65.

Research was conducted (1) to identify stages in the adoption process reached by Lebanese wheat farmers in applying improved fertilizer practices introduced through the result demonstration method in villages in Baalbeck and Akkar Counties, and (2) to identify major social, cultural, personal, economic, and physical factors associated with adoption. A structured questionnaire was used in the personal interviews through which the data were collected. General conclusions based on data analysis were: the result-demonstration method was effective in bringing about adoption, provided farmers participated in the main steps of this teaching method; participation in all four steps was the most effective and participation in the last step, the result step, was most important; level of education below sixth grade showed no significant advantage over no formal education; education at sixth grade level or more showed substantial influence on adoption; respondent group possessed no cultural, social, or other situational characteristics that prevent the adoption of farm innovation, providing recommended practices are economically profitable, feasible within existing facilities, and the advantages are understood by farmers.

- 114 AN APPRAISAL OF THE TRAVELING SCIENCE DEMONSTRATION LECTURE PROGRAM IN OREGON AND ITS EFFECTIVENESS AS AN AGENT FOR INSERVICE EDUCATION. Bogen, Gerald Keith. Oregon Univ., 64-4401, MF \$2.85, HC \$9.90, Ed.D. thesis, 217p., 63.

The contributions of the traveling science demonstrators to the professional growth of the teachers contacted were studied. Two questionnaires were constructed to measure the impact of the program. A "teacher-visited" questionnaire was sent to 415 persons visited by a demonstrator, and a second questionnaire was mailed to eleven demonstrators. It was found that the program (1) stimulated interest and spread the influence of competent teachers of science; (2) encouraged the building of simple laboratory apparatus in smaller and poorly equipped high schools; and (3) provided secondary school students with a deeper appreciation of science and motivation to enter science careers. It was concluded that the structure, operation, and implementation of this program provided an effective inservice education agent for participating science teachers in the state of Oregon.

3065 WORK-STUDY

- 115 ANALYTICAL STUDY OF COOPERATIVE EDUCATION IN THE UNITED STATES AND DEVELOPMENT OF A PROPOSED PLAN FOR IRAN. Farahbakhshian, Ebrahim. Colorado State College, 68-419, MF \$3.00, HC \$9.90, Ed.D. thesis, 218p., 67.

A study was made of cooperative education organization, administration, and state regulations with a view toward developing a cooperative education plan for Iran. Statistical data on manpower needs and development in Iran were obtained, and state directors of vocational education throughout the United States were surveyed. These were among the conclusions

reached: (1) state requirements were basically alike, and coincided with U.S. Office of Education stipulations; (2) most states reported programs already in operation; (3) students working in industry should be more aware of modern industrial methods and more skilled in using machinery than those lacking such experience; (4) conditions in Iran relating to lack of technical-vocational schools, need for adequately trained employees, employment problems in the agrarian areas, and the dropout rate indicate that cooperative education would offer at least a partial solution. Major recommendations included: study of the plan by the Iran Ministry of Education, equal opportunities for boys and girls, special facilities for training coordinators, occupational guidance and counseling, effective use of publicity, regular updating of the curriculum by cooperation between schools and industry, and advisory committees from business, industry, and labor.

3150 AUDIO-VISUAL

- 116 A STUDY OF THE USE OF AUDIO- VISUAL MATERIALS IN THE TRAINING PROGRAMS OF SELECTED BUSINESS AND INDUSTRIAL CONCERNS OF METROPOLITAN DETROIT. Roberts, Thomas Wright. Michigan Univ., 66-14,581, MF \$3.00, HC \$9.70, 213p., 66.

An attempt was made to determine: use, ownership, and future plans for use of audiovisual materials and devices in training programs of business and industry in Detroit, Michigan; the needs for audiovisual training; support functions which could fill such needs; and which of these support functions could be provided by the Audio-Visual Utilization Center of Wayne State University. After two pilot studies, a random sampling design structured for use with a dichotomous population was used and a questionnaire was sent to companies selected as sampling units. Content analysis was used. It was found that there was only limited knowledge and use of audiovisual materials. The Audio-Visual Utilization Center of Wayne State University can assume many roles to help fill audiovisual educational, informational, and service requirements of training units in business and industrial concerns of Detroit.

- 117 A STUDY OF THE EFFECTS OF PRESENTING INFORMATIVE SPEECHES WITH AND WITHOUT THE USE OF VISUAL AIDS TO VOLUNTARY ADULT AUDIENCES. Bodenhamer, Schell H. Ohio State Univ., 64-9549, MF \$2.75, HC \$9.45, 64.

To determine the comparative amount of learning that occurred and the audience reaction to meeting effectiveness, a 20-minute informative speech, "The Weather," was presented with visual aids to 23 and without visual aids to 23 informal, voluntary, adult audiences. The audiences were randomly divided, and controls were used to assure identical physical facilities and arrangements. A multiple-choice test measured the immediate recall after the speech presentation, and a questionnaire determined the differences in introspective reactions. Major findings were: (1) the adult audiences presented a speech supplemented with visual aids learned

significantly more, as measured by immediate recall, than did adult audiences presented the same speech without visual aids, and (2) adult audiences perceived the speech supplemented with visual aids as being at a significantly higher level of effectiveness than the same speech presented without visual aids.

3190 FILM

- *118 CINEMA IN ADULT EDUCATION: A STUDY OF THE FEATURE FILM SERIES IN AMERICA. Chamberlain, Ray Philip. California Univ., 65-6945, MF \$3.35, HC \$11.70, Ed.D. thesis, 259p., 65.

A nationwide study was made of the extent to which series of quality feature films from many countries have become a valued cultural activity. The usable sample comprised 231 series of somewhat similar quality. Most were of five types: standard series (by far the most common); historical (illustrating the history of cinema); specialized (particular themes or types); retrospective (a study in depth of a national cinema); or cycles (extensive presentation of a director's work). They were largely sponsored by libraries, art centers, museums, universities and colleges, film societies, or community service organizations. One recent development is to compress film series into a short residential form (seminars, conferences, and workshops). There has sometimes been opposition from commercial exhibitors, but many instances of cooperation also exist. About 210,000 persons participated in 735 series during 1962-63; average attendance was about 280 per series; and each averaged about 16 films. Admissions totaled about 4,000,000. Only a few series predated 1946. Eisenstein, Ray, Fellini, Kurosawa, de Sica, and Bergman were the most popular directors with film society programmers.

- *119 A COMPARISON OF THE EFFECTIVENESS OF FILM AND BULLETIN IN TRANSMITTING KNOWLEDGE TO NEGRO 4-H CLUB LOCAL LEADERS IN ALABAMA AND CAUCASIAN 4-H CLUB LOCAL LEADERS IN WISCONSIN. Pinnock, Theodore James. Wisconsin Univ., 65-9257, MF \$3.00, HC \$6.00, 122p., 65.

This study compared local 4-H Club leaders (Negroes in Alabama and whites in Wisconsin) on knowledge gained when films or bulletins were used in training meetings. It also sought to compare the effectiveness of films and bulletins, with or without discussion, following presentation of research findings to the Negro leaders; to assess changes in the Negro leaders' knowledge after exposure to such data; and to compare the effectiveness of local and professional discussion leaders. The local leaders appeared more effective than the professionals. There were no differences in Negro leaders' knowledge gain between films and bulletins, or between professional and local leadership of discussion. Negro leaders' education was positively related to gains. Given similar methods of presentation, the Wisconsin leaders surpassed the Alabamians. The Alabama group gained in knowledge when presented with research findings, but the amount of gain depended greatly on educational background.

See also: Item 87 comparison of bulletin, film and lecture, with and without discussion

3200 EDUCATIONAL TELEVISION

- *120 THE CREATION AND DEVELOPMENT OF EDUCATIONAL TELEVISION AS AN INSTITUTION OF ADULT EDUCATION: A CASE STUDY IN AMERICAN HISTORY. Carlson, Robert Andrew. Wisconsin Univ., 68-7092, MF \$7.15, HC \$25.45, 562p., 67.

This historical study analyzes the national development of educational television (ETV) within the context of American political, social, economic, and intellectual life of the 1950's and 1960's. The efforts of ETV activists such as Frieda Hennock, C. Scott Fletscher, and John White to gain sufficient high-level support for ETV are examined. Primary documents as well as personal interviews with many individuals who played crucial roles in bringing ETV into being supplied the data. The study shows that at the national level educational television has been largely an institution of informal adult education because of early backing by the Fund for Adult Education. It has remained that way despite efforts to make it a part of formal elementary, secondary, and higher education by the professional-educational establishment and by the Fund for the Advancement of Education. The most influential support of the ETV institution has come from the Senate Committee on Commerce and from the Ford Foundation.

- *121 DEVELOPMENT OF TELEVISION AND ITS POTENTIAL ROLE IN THE STATE UNIVERSITY OF NEW YORK. Rowe, Robert C. Michigan State Univ., 66-6166, MF \$3.00, HC \$6.40, Ed.D. thesis, 132p., 65.

This study examined the status of educational television in the nation as a whole and in New York. Data were collected through a literature survey, personal interviews with the central administrative personnel of the State University of New York and the State Department of Education who participated in the early planning stages of educational television and interviews with the personnel of the Office of Facilities and Planning of the State University of New York. Evidence demonstrated that television has been used effectively and efficiently on all levels of instruction and in many ways. The findings show that the development of television in New York has been unique from the standpoint of the cooperative support on both the state and local level, but has been slow in comparison to other sections of the country. Recommendations are made for implementing and developing a University of the Air under the aegis of State University, and the policy of using the latest and best media of instruction has been recognized by the agencies of the University concerned in developing plans and specifications for new campus schools, science buildings, engineering building, and other specialized instructional buildings.

- 123 AN ANALYSIS OF THE ROLE OF PRINCIPAL PHILOSOPHIES OF ADULT EDUCATION IN EDUCATIONAL TELEVISION PROGRAMMING FOR ADULTS. Breitenfeld, Frederick, Jr. Syracuse Univ., 64-5644, MF \$2.95, HC \$10.35, 226p., '63.

Assuming educational television to be a form of liberal adult education, its programing, present and potential audiences, and the attitudes of various publics toward it were investigated. Two views toward liberal adult education were recognized. The traditionalist argues that content transcends method, that the goal of liberal adult education is individual change, that the audience for continuing education is limited to intellectually curious community leaders, and that the result is an improved community. The modernist contends that--method can be educative in itself, the goal of liberal adult education is often community betterment, the audience for continuing education is the entire populace, and the result is a group of improved individuals. Programming rationale appears to be of the modernist camp, but the design of most programs follows the traditionalist view. Educational television reaches community leaders who are not avid general television fans. The traditionalist considers this right. The modernist argues that educational television should compete with commercial stations for audiences in order to expose those who need it to cultural enrichment.

- 124 THE CONTRIBUTIONS OF FOUR NATIONAL ORGANIZATIONS TO THE DEVELOPMENT OF EDUCATIONAL TELEVISION IN THE UNITED STATES. Houk, Marian M. American Univ., 64-2437, MF \$4.40, HC \$15.55, Ed.D. thesis, 343p., 63.

The major problem of this study was to analyze the significance of the contributions to the educational television movement in the United States made by the United States Office of Education, the National Association of Educational Broadcasters, the National Education Association, and the Ford Foundation, organizations active in the initiation and development of the educational television movement from 1950 to 1962. Supporting problems studied were the motivations of each organization for participating in the educational television movement, the interrelationships among the organizations, and their future plans for continued activity in the field.

- 125 LEISURE AND TELEVISION: A STUDY IN COMPATIBILITY. Meyersohn, Rolf Bernard. Columbia Univ., 68-8549, MF \$4.85, HC \$17.10, 378p., 65.

This seven-chapter essay investigated determinants of television viewing. An introductory chapter suggests the prematurity of considering social effects and the desirability of examining social determinants of television. Chapter One contains a summary of television viewing as studied in the context of communications, leisure, and time-allocation research. The remaining chapters are based on a national sample survey of 2,291 American Adults who own television sets. Chapters Five and Six deal with social conceptions of television time: how much is right and who thinks he spends too much or too little time watching. Regardless of the actual amount of time spent viewing, the well educated appear immune from feeling

they do not view enough, the little educated from feeling that they view too much. This contradictory set of expectations and evaluations is discussed in the final chapter. Viewing is highest among those social groups whose rate of being at home is also highest (housewives, the poor, the old, the retired, the widowed); among those social groups which have the fewest alternative leisure resources; and among those social groups which are neither on the bottom nor the top of the educational ladder.

- *126 THE USE OF TELEVISION IN ADULT EDUCATION: RESEARCH EVIDENCE AND THEORETICAL CONSIDERATIONS. Zettl, Herbert Lorenz, California Univ., 66-8428, MF \$5.30, HC \$18.70, 414p., 66.

This study sought to detect major trends and areas in the use of television in adult education and to suggest useful generalizations. Research studies were grouped by program source, educational method, program format, production techniques, program reception, and viewer reaction. These communication categories were then correlated, with the learner as a constant factor. Major findings included the following: (1) educational television (ETV) viewers generally have similar socioeconomic and social participation characteristics but differ in their goal and reward orientations; (2) the main factors in ETV viewing and adult education participation seem to be learning skills and attitude toward educational institutions and methods; (3) there is a difference in learning between voluntary, at-home ETV audiences and involuntary at-home or in-school audiences. Five conceptual models attempted to show that ETV effectiveness depends on interrelated viewer, medium, and message requirements. However, research has not shown how the various adult audiences in need of education can best be reached.

- *127 THE USE OF TELEVISION FOR INSTRUCTION IN ADULT EDUCATION. Worrall, Robert Paul. Michigan State Univ., 65-8415, MF \$3.00, HC \$9.00, 198p., 65.

In an effort to determine the practicality of using television for instruction in adult education, a case study was conducted during 1960, 1961, and 1962 based on the production, distribution, and evaluation by viewers of the television series "Plants are for People," produced and distributed by the Cooperative Extension Service of Michigan State University. The general hypothesis tested and proved was that a successful gardening and ornamental horticulture educational television program could be produced by a Land Grant University, accepted by a commercial television station, and broadcast at a desirable time. During 1961 a series was also originated by Ohio State University and distributed in Michigan, Ohio, Illinois and New York. It was found that knowledge level of recommended practices was not influenced by socioeconomic characteristics or income level. Significant increases, however, were noted among those with varied communication habits, leisure time spent in reading about gardening or ornamental horticulture, membership in garden clubs, and use of Cooperative Extension Service information.

- *128 AN INVESTIGATION OF FOUR TELEVISION TEACHING FEEDBACK TECHNIQUES VIA A CLOSED CIRCUIT SYSTEM. Copeland, Jimmy Bryant. Wisconsin Univ., 66-13,778, MF \$3.00, HC \$6.60, 136p., 66.

This study aimed at an investigation of four television teaching techniques via a closed-circuit system. Eighty vocational agriculture students comprised four groups: group A viewed the program without any opportunity to participate in two-way communications or ask questions before or after the telecast; group B viewed the program as group A but had a group leader qualified to answer questions concerning subject matter; group C viewed the program as group A and, in addition, had two-way communication with the television instructor via telephone (they had no group leader); group D viewed the program as group B and in addition to a group leader, had two-way communication with the television instructor in the studio. An analysis of variance showed no significant overall effect due to the treatments and a multiple range test showed a significant difference only between the extremely high and the extremely low means--no teacher/with phone being significantly lower than teacher without phone.

See also: Item 302 television in continuing medical education

3250 EDUCATIONAL RADIO

- *129 THE LISTENING GROUP IN ADULT EDUCATION. Ohliger, John F. California Univ., 66-12,849, MF \$3.95, HC \$13.95, Ed.D. thesis, 308p., 66.

This thesis examines listening group projects in over 30 countries in the past 45 years. The historical study and the review of research are broken down into the elements of--purposes and outcomes of projects, clientele, broadcasts and supplemental printed materials, methods of group organization, methods of postbroadcast discussions, group leadership, and feedback. Direct and related research is evaluated in regard to the conclusion that such groups can spread the learning of factual material, promote the development of desired attitudes, increase interest in public affairs, affect motivation toward group and individual action, and contribute to more direct democracy. Other research findings point to the tentative conclusions that (1) projects need a substantial staff of field organizers, and (2) listening groups attract clientele of lower educational and economic attainment than the typical participant in adult education. Special emphasis is placed on early efforts of the British Broadcasting Corporation, America's Town Meeting of the Air, Canada's National Farm Radio Forum, and the many projects of UNESCO in underdeveloped areas.

- *130 THE APPLICATION OF RADIO IN COMMUNITY EDUCATION IN ETHIOPIA. Inquai, Solomon. 143p., 64.

In this study the use of radio in adult education is examined and its application in Ethiopia is proposed. Adult Education programs in the United States, Canada, Brazil, Colombia, and India were studied. Questions answered include: (1) How is radio used in adult education? (2) What are its effects and limitations? (3) Can Ethiopia learn from the experience of these countries?

- 131 FARM RADIO FORUM PROJECT-GHANA, 1964-65. Abell, Helen C. Guelph Univ., 65.

In 1964-65 the government of Ghana, in cooperation with UNESCO and the government of Canada, carried on the Farm Radio Forum pilot project in 80 villages in Ghana to transmit information and stimulate rural self-help activities. In 20 villages one Forum listening group was organized, 20 villages had two listening groups, 20 control villages were supplied with radios but no listening groups were formed, and 20 had no radios and no listening groups. Through pre- and post-broadcast questionnaires, it was found that the listening groups contributed to villagers' comprehension of such subjects as inter-village cooperation, formation of cooperatives, and food and nutrition. It was recommended that only one listening group per village be formed in the future, and that this group be representative of the sex, educational level, and occupations of the adult population, that modified listening groups be organized in small or remote villages where there is no resident literate adult to serve as group secretary, and that a policy-making steering committee, representative of government ministries and organizations concerned with rural life, be formed to guide future forum activities. (Appendixes include questionnaires used.)

- 132 RADIO DRAMA: A TECHNIQUE OF ADULT EDUCATION. Burull, James Robert. 66-4534, MF \$3.00, HC \$9.45, 206p., 66.

To investigate radio drama's attributes as an adult education technique, "Home is What You Make It," a radio series broadcast from November 1944 to February 1948 was analyzed for elements useful for presenting the adult educator's objectives--providing practical information, encouraging cultural development and desire for further study, aiding development of critical judgment, and promoting awareness of civic responsibility. Evidence indicates that radio drama can express the adult educator's message even though the educational message is cloaked by the medium's entertainment nature. Radio drama appears to be capable of presenting information, maintaining response and attention, presenting messages repetitiously, and of potentially providing a framework for information and illustration of attitudes, concepts, ideals, and values through characterization and example. (Appendixes are: a list of network informative radio dramas 1941-1946, series program titles, and persuasion devices used in the "Home" script.)

3400 CURRICULUM MATERIALS

See: Item 488 treatment of doctrine of the Holy Spirit in church school materials; 489 Christological emphasis in adult church school material; 400 peace discussion manual; 255 materials and achievement in adult basic education; 259 relative effectiveness of materials for new literates; 260 writing styles for functionally illiterate

3500 INSTRUCTIONAL DEVICES

3600 LEARNING FACILITIES

- 133 A STUDY TO DETERMINE THE SPACES AND FACILITIES NEEDED TO HOUSE THE EVENING ADULT EDUCATION PROGRAM AS IT NOW EXISTS IN NEW YORK STATE. Hick, Basil Leo. Columbia Univ., 64-4316, MF \$2.75, HC \$7.20, Ed.D. thesis, 151p., 63.

This was a project to develop a guide for planning the space and facilities needed to house evening public school adult programs in selected New York State communities. By analyzing building plans on file in the New York State Education department, and by conferences with directors, instructors, and students in selected school districts, data on available space and desired facilities were obtained. Findings included the following: (1) when favorable Board of Education policy was supplemented by ample budget allocations, vast improvements ordinarily occurred; (2) in existing structures, the provision of well located, ample storage facilities overcame many difficulties for both staff and students; (3) some buildings built before 1940 required improved lighting, heating and ventilation systems in order to be suitable for evening adult programs. However, there must be more attention to such aspects as parking, administrative space for directors, and properly located, ample storage rooms.

3800 PERSONNEL AND STAFFING

4000 TEACHERS, LEADERS, CHANGE AGENTS

4010 COOPERATIVE EXTENSION

- *134 CONCEPTS OF EDUCATION HELD BY INFORMAL ADULT EDUCATORS. Metcalfe, William W. Chicago Univ., 223p., 65.

A study was made of concepts of education held by 304 male county agricultural extension workers in 186 counties of Illinois and Indiana. Measuring tools included the Educational Orientation Measuring Device, a 24-item forced-choice schedule with typical activities of county extension workers; and rating involved the perceptions of superiors and the examination of three of each respondent's monthly narrative reports. Significant variations among the scores as revealed by the Concept of

Education Score, supported the hypothesis that there are identifiable differences among county extension workers as to the breadth of their concepts of education. Significant relationships were identified between only two of ten experimental factors involving educational and occupational or family experience, and the breadth of educational concepts held by informal adult educators. The hypothesis that county extension workers, who hold broad concepts of education will be more educationally oriented toward their professional responsibilities than those who hold narrow concepts of education, was accepted on the grounds of significant correlations among the three educational orientation indexes.

- *135 ANALYSIS OF THE NATURE OF CHANGE IN STAFFING THE COOPERATIVE EXTENSION SERVICES WITH SPECIAL REFERENCE TO THE EDUCATIONAL REQUIREMENTS OF COLLEGE GRADUATES. Deere, Runyan Elton. Wisconsin Univ., 66-4537, MF \$5.05, HC \$18.00, 396p., 66.

This study analyzed Cooperative Extension Service staffing changes and future needs and trends relative to generalist and specialist jobs, college majors, level of educational attainment, sources and availability of candidates, work experience, and starting salaries. A staffing model was developed as a frame of reference and as a means of data analysis. These were among the findings and conclusions: (1) Federal legislation has had a major influence on staffing practices; (2) the principal staffing innovations that took place or were planned to meet rapid technological, economic, and social change occurred in the minority of states with coordinated or merged extension services; (3) innovations included less emphasis on agricultural subject matter, and greater hiring of specialists and of those with previous nonfarm work experience; (4) academic attainment was expected to rise about one degree level during 1965-70; (5) except in states with merged or coordinated extension services, inservice training and professional development programs tended to be stressed rather than recourse to the job market. (Included are the questionnaire, personnel forms, bibliographies, and 104 tables.)

- *136 EVALUATION OF APPLICATION BLANKS USED IN THE COOPERATIVE EXTENSION SERVICE WITH SPECIAL ATTENTION GIVEN TO THEIR VALUE IN THE PERSONNEL SELECTION PROCEDURE. Bath, Robert Wayne. Wisconsin Univ., 63-7577, MF \$2.75, HC \$8.60, 188p., 63.

Cooperative Extension service application blanks were evaluated with special attention to their value in personnel selection. Extension agent application blanks from the 50 state extension services were analyzed to determine common and unusual items. Responses submitted by 194 applicants to the Minnesota Cooperative Extension Service were also examined. Relationships were determined between successful and less successful male county extension personnel and between employed and unemployed applicants. As shown by analysis of data and in a review of pertinent literature, application blanks items varied widely by states, selection by paired comparisons was satisfactory when based on the criterion of job performance, responses relating to employment status were

statistically more significant than data on relative success, and the weighted application blank technique and discriminant functions analysis would have slightly improved the selection of successful employees.

- *137 PRODUCTION OF ADULT EDUCATORS' ATTITUDES TOWARD INSTITUTIONAL CHANGES. Apel, John Dale. Chicago Univ., 208p., 66.

This study tested the notion drawn from psychological, sociological, and administrative theories that an individual's personality or value system is a less adequate measure of his attitude towards change than is his perception of the effects of change on his personal interests and institutional goals. Data, collected by means of a questionnaire administered to 390 staff members of the University of Wisconsin Extension Division, were analyzed statistically by factor analysis. The Rokeach Dogmatism Scale was the personality dimension. Scores on the five-scale items were useful in predicting the ability to interpret relationships correctly but were not effective in predicting reactions to specific suggested changes. Findings indicated that one's view of the effects of change on institutional goals and personal interests is far more predictive of attitudes than is open-mindedness or any general predisposition for or against change. Program implications, limitations of the study and research needs were duly noted.

- 138 THE ROLE EXPECTATION OF THE EXTENSION SUBJECT MATTER SPECIALISTS IN NORTH CAROLINA AS SEEN BY THE SPECIALISTS AND COUNTY AGRICULTURAL AGENTS. Andrews, Walter G. Cornell Univ., 63-4818, MF \$2.75, HC \$8.00, 191p., 63.

A study was made in North Carolina of role expectations of subject matter specialists as identified by 83 white county agricultural agents and 78 white specialists. A comparison of the agents' concept of the specialists' role, and the specialists' concept of their own role was made, and the variables of education and experience were analyzed. Sixty activities of the specialists were divided into three major areas--and rated for present and expected performance. Tests of significant differences were determined by the chi-square method. Results revealed an extensive gap between present role performance and role expectations. More assistance was expected from the specialists in county program planning and evaluation, and promotion of better understanding of the extension program with related educators and the general public. The specialists were also expected to cooperate with researchers and provide local agents with research findings and suggested county applications. More specialist assistance in the form of consultations was desired.

- *139 THE INFLUENCE OF SELECTED FACTORS ON THE NORTH CAROLINA COUNTY EXTENSION WORKER'S DEFINITION OF THE ROLE OF COOPERATIVE EXTENSION. George, James Dalton. Florida State Univ., 68-5924, MF \$3.00, HC \$8.20, 179p., 67.

The purpose of this North Carolina study was to assess the relationship between selected aspects of county extension agents' background and experience (mainly college majors and participation in courses on extension methods) and their definition of the role of Cooperative Extension. Respondents were 334 agents representing 99 of the 100 counties of the state. Role definitions, as measured by rating scale, formed a continuum ranging from primary stress on agricultural education to a perception of broad adult education responsibility toward farm, rural nonfarm, and urban dwellers. A related variable involved a continuum ranging from emphasis on overall behavior change to emphasis on technical agricultural advisory service only (social science versus agricultural science). Positive relationships were obtained between the broader view of Cooperative extension and the variables of college major, methods course participation and social science orientation, and between educational experiences and social science orientation. Various implications for program administration, planning, and further research were derived. (The document includes 20 tables, four diagrams, and 62 references.)

- *140 AN ANALYSIS OF THE EXTENSION WORKER'S KNOWLEDGE OF EXTENSION PROGRAMS. Stonecipher, Charles Leroy. Wisconsin Univ., 66-9972, MF \$3.00, HC \$8.00, 195p., 66.

Forty-four employees of the General Extension Division of the Nebraska Agricultural Extension Service and 119 Agricultural Extension employees of the University of Nebraska comprised the population of this study comparing personnel's knowledge of Agricultural Extension and General Extension programs and differences in knowledge of programs according to job position and tenure. Subject content, methods and techniques, sources of finance, service activities provided, and clientele were specific aspects considered. Data were gathered from Extension records, interviews with administrators, and through questionnaires mailed to personnel. Frequency counts and percentages present workers' responses. Some general findings were that personnel were more knowledgeable about their own programs than those of the other extension organization, personnel of neither organization knew the relative emphasis given to specific areas or greatest source of funds, personnel viewed the programs and clientele of the two organizations as similar, and knowledge of extension programs and tenure were related among General Extension administrators.

- *141 PERCEPTIONS OF THE COUNTY 4-H CLUB AGENT'S ROLE IN WISCONSIN. Robinson, Russel D. Wisconsin Univ., 63-5756, MF \$3.00, HC \$10.60, 232p., 63.

Perceptions of the 4-H club agent's role were studied from the viewpoint of club agents, county coworkers, supervisors, and officers of county leader's organizations. Data were obtained through personal or group interviews with 189 respondents. Forty job activities were classified into the four categories of (1) planning and evaluating club programs, (2) organizing and promoting local clubs, county events, and activities, (3) providing instruction to leaders and members, and (4)

rendering personal service to individuals, clubs, and organizations. It was found that supervisors, agents, and leaders had different perceptions of the role of county 4-H club agents. All groups agreed that planning and evaluation should receive top priority and personal service should be de-emphasized. Within each of the four aspects, there was lack of agreement among respondent groups as to relative importance that should be accorded various activities. Findings were inconclusive when county influence on degree of importance received was compared to degree of importance perceived in the four role aspects.

- *142 A STUDY OF COUNTY EXTENSION AGENTS' PROGRAM PLANNING ROLE IN NORTH CAROLINA, OHIO AND VIRGINIA. Farnsworth, William Franklin. Wisconsin Univ., 63-7605, MF \$3.65, HC \$12.85, 277p., 63.

This study investigated the perceptions of their program planning role held by 588 county extension agents in North Carolina, Ohio, and Virginia. A functional model of the program planning process was developed and evaluated and questionnaire interviews were held. Agents were asked to indicate whether each suggested task was part of their role; its degree of importance; the degree to which they performed each task; obstacles encountered in role performance; and planning assistance obtained from state staff members. The model was a realistic role definition. County agents saw their role as including formulation of statewide program planning frameworks; adapting state frameworks to counties; organizing resources to plan county programs; and developing written county programs and annual work plans. They saw their performance of the tasks to be below the level of importance assigned to them. Obstacles lay in lack of time, of training, and of adequate local leadership. Assistance by state staff members was judged inadequate. Formal program planning course work was the chief factor influencing perception.

- *143 THE RELATIONSHIP BETWEEN PERSONAL VALUES AND FOUR-H CLUB ADULT LEADERSHIP. Allen, Dean C. Chicago Univ., 9783, 263p., 63.

Personal values of adult volunteer Four-H Club leaders were studied to discover factors associated with persons who continue their responsibility in contrast with those who end their activities after one or two years. Interviews were held with a sample of 120 first or second year leaders, half of whom had discontinued their leadership responsibilities. Men and women were equally represented and the tenure and sex categories were distributed in comparable numbers among five Michigan counties closely matched on demographic, social, and program factors. Cattell's Sixteen Personality Factor Questionnaire was also used. Major findings include: (1) friendship was more important to continuing leaders than to dropout leaders regardless of age, sex, or social status; (2) a subsample of dropout leaders placed greater emphasis on new experiences and less emphasis on orderliness than continuing leaders; (3) leadership of Four-H Club was a community activity in addition to those organized community activities in which people customarily participate; (4) continuing leaders were more satisfied with their accomplishment of "people-related" life goals than were dropout leaders.

- *144 MEASURES OF LEADER BEHAVIOR AND THEIR RELATION TO PERFORMANCE LEVELS OF COUNTY EXTENSION AGENTS. Cunningham, Clarence J. Ohio State Univ., 65-1171, MF \$2.75, HC \$9.00, 64.

The purpose of the study was to (1) develop an instrument to measure leader behavior dimensions of consideration and initiating structures as applied to county extension agents, and (2) determine whether the dimensions were sufficiently related to performance to permit the instrument's use for selecting and placing agents. A leader description questionnaire, purported to measure leader behavior, was used as a basis for developing three experimental scales. The most valid of these scales was completed by 185 agents and their immediate supervisors, resulting in data which were used to determine four agent classification groups. The groups were compared for personnel performance score differences by an analysis of variance. The instrument was fairly reliable when used by supervisors to describe agents but not when used by agents as a self-description scale. The agents who ranked above the median on both initiating structure and consideration were those judged by supervisors to be the most efficient performers. These agents performed at a high level regardless of leader behavior of other agents working with them. The leader behavior theory upon which the study was based was supported.

- 145 TRAINING NEEDS OF COUNTY AGRICULTURAL EXTENSION AGENTS IN QUEBEC, CANADA. Bouchard, Andre Joseph. Ohio State Univ., 67-2417, MF \$4.10, HC \$14.40, 310p., 66.

The purpose of this study was to ascertain what training county agricultural extension agents felt was needed for proficiency in their jobs. Data were obtained from 161 of the 182 agents in the Province with a 191-item questionnaire categorized into (1) program planning, (2) psychological and educational principles, (3) performance of educational activities, (4) research and evaluation, (5) knowledge about the extension service, (6) social knowledge, and (7) technical subject matter. Spearman's rank correlation was used to ascertain relationships between training needs and age, tenure, and professional status. All agents expressed need for more training in program planning and less in technical subject matter. The training needs of younger as compared to older agents showed low correlation. The greatest differences in training needs were between the 0-2 year and 5-10 year tenure groups. High relationships were found between training needs among professional status groups, although no great differences were obtained between the rank order coefficients in the areas of training when training needs were compared on the basis of age and tenure groups.

- *146 A STUDY OF THE PERCEIVED ROLE OF COUNTY EXTENSION AGENTS IN PROGRAM PLANNING IN FLORIDA AND KANSAS. Straughn, Alto Alfred. Wisconsin Univ., 64-613, MF \$3.90, HC \$13.75, 304p., 63.

A study was made to define county extension agents' perception of their program planning role, to assess influences on perception, and to formulate a functional model of the program planning process. Respondents were 247 Florida and Kansas agents with five or more years experience. A questionnaire covered personal data, suggested program planning phases supported by the literature and by experts, and assistance received and obstacles encountered in performing the role. Relationships of experience factors to perceptions of the program planning phases were determined statistically. Findings included the following: (1) the model was accepted as a realistic role definition; (2) agents perceived the program planning role to include helping formulate and agree on a state-wide planning framework, adapting the framework to the county, organizing resources to plan the county Extension program, and actually planning and developing the program; (3) agents generally saw their own program planning task performance as below the level of importance assigned to the tasks; (4) major obstacles were lack of time, lack of suitable training, and a shortage of trained and interested local leaders; (5) percentage of working time spent was the chief influence on perception.

- *147 THE ROLE OF EXTENSION SPECIALISTS IN RURAL AREAS DEVELOPMENT. Taylor, William Henry. Cornell Univ., 64-3634, MF \$2.75, HC \$8.80, Ed.D. thesis, 192p., 63.

The specific objectives of this study were: to identify the professional activities that should be performed by a Rural Areas Development (RAD) specialist, and to determine differences, if any, in role expectation of a RAD specialist as viewed by State Extension directors, supervisors, RAD specialists, and county agents. An open-end questionnaire was administered to 20 extension workers, at four levels, to obtain potential test items. The final questionnaire was administered to 61 supervisors, 29 RAD specialists, and 73 county agents located in 31 states and 73 counties where the program had operated since 1955. The data showed that an extension RAD specialist was a resource person for county extension personnel and RAD committees in program development and execution. Included among his duties were: teaching, supplying of educational materials, interpretation of Federal policies and programs, and offering of suggestions for improvement. The role expectation held by directors, supervisors, RAD specialists, and county agents were examined, and significant differences were found at the .01 level in three professional activities and at the .05 level in ten.

- *148 THE DISPOSITION TOWARD CHANGE OF COUNTY EXTENSION LEADERS. Trew, Ernest M., Jr. Chicago Univ., 240p., 65.

The study investigated the disposition toward change in county extension programs on the part of county extension agricultural agents and key volunteer extension leaders. This disposition toward change was studied in relation to their local-cosmopolitan orientation and to county situational factors. Data were collected with instruments mailed to county extension agricultural agents and key volunteer extension leaders in 125

Texas counties. Agents and leaders in the study sample were favorably disposed toward change in county extension programs, with agents showing the greatest inclination. Local-cosmopolitan orientation was not related to disposition toward change in county extension programs. Only one of eight indicators of agent cosmopolitanism (education) and one of eleven indicators of leader cosmopolitanism (professionalism) were associated with disposition toward change. None of the county situational factors studied was related to agent or leader disposition toward change in county extension programs or to local-cosmopolitan orientation. Age of agents and leaders was not related to local-cosmopolitan orientation or to disposition toward change in county extension programs.

- *149 AN ANALYSIS OF SELECTED FACTORS RELATIVE TO PROGRAMMING EFFORTS OF KENTUCKY COUNTY EXTENSION AGENTS. Utz, Alan Pearson, Jr. Wisconsin Univ., 65-5151, MF \$4.00, HC \$14.20, 311p., 65.

The specific objectives of this study were to identify: sources of satisfaction and dissatisfaction as related to the degree of success of county agents who were engaged in programing; factors associated with effective and ineffective performance of county agents as they carried out tasks pertaining to programming relationships between specific characteristics of county agents related to their success in programming. The critical incidents method was used as a basis for the semistructured interview schedule that was administered to 73 agents. In 41% of all responses, the organization was the major source of satisfaction; in 33%, the local society was the major source of satisfaction. In 26% of the responses, agents selected a course of action in which their satisfaction was based upon satisfying the demands of both the organization and the local society. Most of the respondents' dissatisfying incidents were described as resulting from an unsuccessful programming experience. Sixty-four percent of these incidents were selected from sources internal to the organization, and 36% were from sources external to the formal organization.

- *150 A STUDY OF STATE EXTENSION SPECIALISTS' ROLE IN PROGRAM DEVELOPMENT IN ARKANSAS. Word, Ulyss G., Jr. Wisconsin Univ., 64-10,336, MF \$4.10, HC \$14.40, 319p., 64.

Staff members' perception of the specialist's role in program development and how these are influenced by selected factors were studied and a functional model of the program-development process was formulated. Data on respondent characteristics and suggested phases and tasks of the program-planning model were collected by questionnaire from 145 Arkansas Extension staff members, including all administrators and specialists, and half of all county agents with tenure. It was found that the proposed model consisting of eight phases encompassing 63 functions depicts the specialist's role, and there were differences among respondents in perceptions of priority of performance that specialists should give to specific functions in the model. A larger percentage of agents than either specialists or administrators perceived the phases as being

performed satisfactorily. Position in the organization, tenure in Extension, level of formal education, and major area in which highest degree was earned were factors which influence staff members' perception of the specialist's role.

- 151 A STUDY OF PROGRAM LEADERSHIP AMONG EXTENSION SPECIALISTS DIRECTED TOWARD LEARNING WHAT FACTORS AUGMENT AND DETER LEADERSHIP EXPRESSION. Michaelsen, Leon Claude. Cornell Univ., 67-13,920, MF \$3.00, HC \$7.80, Ed.D. thesis, 170p., 67.

This study sought to identify factors which facilitate or deter leadership expression in rural extension specialists. Questionnaires were sent to specialists in ten states who devoted 50% or more of their time to extension work in production, management, and resource use, and to those working in marketing. Evaluations were secured from specialists' supervisors and from agents familiar with the specialists' work. Results included the following: (1) specialists aged 45-55 exercised more leadership than older or younger specialists; (2) those supervised by extension personnel exercised more leadership than those supervised by university department personnel; (3) specialists exercised greater leadership if they thought that such leadership was regarded favorably by administrators, felt their leadership would be accepted by others, and received either supportive or restrictive feedback from important others in their professional world; (4) despite the importance of leadership in most position descriptions, leadership tended to be deemphasized by tradition, operating procedures, and official attitudes.

- *152 FACTORS ASSOCIATED WITH MOTIVATION TOWARD PROFESSIONAL DEVELOPMENT OF COUNTY AGRICULTURAL EXTENSION AGENTS IN MINNESOTA. Swanson, Harold Burdette. Wisconsin Univ., 65-10,669, MF \$3.70, HC \$13.05, 286p., 65.

This study explored motivation toward professional development, including conferences, reading, consultation, and graduate work. A mailed questionnaire collected personal data from 90 Minnesota county agricultural agents and a group-administered test and questionnaire determined agent's relative degree and type of motivation. Maslow's hierarchy of needs was a basis for arranging motives in an ascending order, and Herzberg's idea of dual motivation was used to determine forces most important in encouraging or discouraging professional development. There was a significant relationship between graduate study motivation and age, professional orientation and aspiration, and family support. Significant association was found between degree of professional improvement motivation and graduate work completion and aspiration in extension. Positive forces in graduate work were promotion and improved salary, while negative forces were time, costs, and family obligations. Positive forces in professional improvement were changing knowledge and audience needs, and negative forces were time, cost, unavailability of educational opportunities and family pressures. Lack of support or opposition to graduate work were perceived from local forces.

- 153 A COMPARISON OF THE ATTITUDES OF THE MICHIGAN COOPERATIVE EXTENSION STAFF TOWARD MARKETING, AGRICULTURAL POLICY, AND FARM ORGANIZATION. Hadley, Herbert Harlan. Michigan State Univ., 68-4144, MF \$3.00, HC \$8.40, 183p., 67.

Comparisons were made of commercial farmers' and Extension agents' views of the general farm situation; the effects of government price supports on farm prices; the existing market structure and acceptable ways of bargaining for increased farm product prices; and views of the general farm organizations and how they should be organized and run. Findings were based on the mail response of 140 Michigan Extension staff members and a sample of 331 Michigan farmers. The Extension staff and farmers felt that Michigan farm income was too low and that government price supports were not effective in increasing it. Farmers believed that the marketing system needed to be changed and favored collective, voluntary action rather than reliance on government for changes in the system; but they were reluctant to impose restricting controls, either by government or collectively, upon their freedom for individual action. Expressed was the need for a new type of education for young farm leaders and for institutions to undertake new leadership in changing communities. (Test instruments are included.)

- *154 AN ANALYSIS OF THE ASSOCIATION OF SELECTED FACTORS TO JOB PERFORMANCE OF COOPERATIVE EXTENSION AREA-SPECIALISTS. Woeste, John Theodore. Wisconsin Univ., 67-6846, MF \$4.25, HC \$14.85, 329p., 67.

The job performance of area-specialists and county agents in Kentucky and Indiana Cooperative Extension Services was measured; and relationships between their job performance and personal and organizational variables were identified. Data were collected by 350 self-reported work samplings per respondent during one work cycle in the Spring of 1966, and by interviews. Analysis of data was by frequency distribution, differences of means and proportion tests, and the one-way ANOVA technique. Relationships were not found between methods of financing area-specialists' work and job performance; the number of relationships prescribed and the percentage of time spent in internal organizational contacts; the type of job stipulated in prescribed organizational relationships and staff coordination index value; and area-specialists' field of specialization and job performance. Among conclusions were: a need exists for greater understanding of the duties and responsibilities of the field staff; insufficient contact exists between area specialists and county agents; specialization in decision making exists in extension organizations; highly trained professional personnel spend a large percentage of time performing routine tasks; and clientele can be involved in the financing of area specialists' work.

- 155 FACTORS ASSOCIATED WITH JOB PERFORMANCE OF ASSISTANT AND ASSOCIATE COUNTY AGENTS DOING 4-H CLUB WORK, LOUISIANA, 1964. Gassie, Edward William. Louisiana State Univ., 65-6406, MF \$2.75, HC \$7.80, 168p., 65.

This study aimed at determining the level of job performance of 4-H agents in Louisiana; obtaining information from them about personal, social, and educational characteristics; determining the relationship between selected factors and the level of job performance, using factors commonly believed to be associated with successful job performance. Job performance of the 4-H agents was ranked by the district agents and the district program specialists using the paired comparison method of personnel appraisal. Based on this ranking, the 4-H agents were divided into higher and lower performance groups. Data were obtained from 54 agents in 50 parishes throughout the state. Additional information was secured from college transcripts. Sixty-four personal, social, and educational factors were tested to determine if there was a significant relationship between each factor and the level of job performance. Significant relationships, of either a positive or negative nature, were found to exist between the level of job performance and seven of the factors tested. Relationships were considered significant at the .20 level using the chi-square test.

- *156 AN ANALYSIS OF THE EDUCATIONAL NEEDS OF COUNTY EXTENSION AGENTS IN TENNESSEE. Ussery, Margaret Ann. Wisconsin Univ., 64-3247, MF \$4.00, HC \$14.20, 311p., 64.

The study examined self-expressed educational needs of county Extension agents in Tennessee in the important competency areas of Extension organization and administration, program planning and development, understanding social systems, the educational process, communications, human development, critical thinking, research and evaluation, and technical knowledge. Questionnaire data were collected from 339 respondents. These were among the conclusions and findings: (1) competence in communications, program planning and development, the educational process, and critical thinking were considered highly important to agent effectiveness; (2) educational needs were greatest for the educational process, human development, program planning and development, and communications; (3) agricultural agents' main needs for technical knowledge pertained to marketing and farm management; (4) home economics agents' chief educational needs lay in managerial ability in family finances, using time and money, and meeting the needs of today's youth; (5) agents' position and sex affected needs in the areas of program planning and development, critical thinking, and research and evaluation.

- 157 AN ANALYSIS OF TRAINING NEEDS OF EXTENSION AGENTS IN URBAN AND FARM COUNTIES. Kalangi, Christopher Jayadas. Ohio State Univ., 63-6251, MF \$2.85, HC \$9.90, 219p., 63.

This study sought to analyze the training needs of urban and rural county Cooperative Extension agents in various positions. Identified in terms of 142 items in nine training areas, these needs were elicited in a questionnaire using a four-point rating scale, followed by correlation for different areas and duties. Respondents were 330 agricultural, youth, and home economics agents in 11 northeastern and north central states.

General conclusions derived were: (1) training needs of urban and rural agents differ significantly within, but not among, areas of training; (2) training needs vary on an urban versus farm basis as well as by position; (3) differences in training needs between urban and rural agents were greater for youth work than for other fields; (4) a high degree of technical subject-matter training is more important for home economics agents than for the others. All groups of agents needed more training in principles of evaluation, intensive training in county-level organization and policy, and much training in community development, public affairs education, civic responsibility, public speaking, and written communications.

- 158 PERSONALITY CHARACTERISTICS OF MALE COUNTY EXTENSION PERSONNEL IN WISCONSIN. Mahboob, Shaikh Golam. Wisconsin Univ., 66-7653, MF \$4.10, HC \$14.40, 318p., 66.

This study was made of the personality of male county extension personnel in Wisconsin and of the relationship of personality to selected environmental and attitude variables. Eighteen personality traits related to social living were selected and seven environmental variables and three attitude variables. Data came from a random sample of 79 male extension agents in Wisconsin. The California Psychological Inventory (CPI) was used to measure personality characteristics; a questionnaire was used to collect data on environmental and attitude variables. Analysis of variance, the t-test, and the chi-square test were used. Some major findings were: Most agents were high on all 18 traits except flexibility, on which almost half were low. Flexibility rose with job experience of four to seven years and then fell sharply. Agents with eight or more years experience also showed low social presence. Some had a low development of personality traits. Job satisfaction was positively related to Dominance, Sense of Well-Being, and Achievement via Conformance; Intellectual Efficiency and Psychological-Mindedness tended to be positively related to attitude toward graduate study.

- *159 THE RELATIONSHIP BETWEEN EDUCATIONAL PARTICIPATION AND THE INNOVATIVENESS OF COOPERATIVE EXTENSION AGENTS. Netherton, J. D. Chicago Univ., 176p., 67.

A study was made of the relationship between innovativeness and educational participation of county extension agents, plus the relationship of nine demographic factors with each of the two main variables. The subjects were county extension agents and their district supervisors in Arkansas, Oklahoma, and Texas. Innovativeness was assessed through the average score of the independent rating by a panel of three judges; the General Activities Survey, adapted from Litchfield's Leisure Activity Survey, measured each agent's degree of voluntary educational participation and provided the main demographic factors. A product-moment correlation was used to determine the extent of the relationship. A scatter diagram of innovativeness and participation scores helped to affirm the finding that the scores were not significantly linearly related. Extent

of innovativeness or participation may be found associated with factors such as age, formal education, tenure, and parents' education and occupation, but no one factor or combination of factors can be used as a predictor of the behaviors. Relationships among all factors were very slight even when significant.

- 160 IMPROVING AGRICULTURE IN SYRIA THROUGH A PROGRAM OF EXTENSION EDUCATION. Mougharbel, Said K. Georgia Univ., Athens., 63-7459, MF \$4.30, HC \$15.10, Ed.D. thesis, 334p., 63.

The purpose of this study was to propose a program of training in agricultural extension education for the improvement of agriculture in Syria consistent with the traditions of Syrian life and in harmony with constitutional provisions and enlightened educational practice. Review of the history and socioeconomic conditions of Syria, where 70% of the population is engaged in agricultural occupations, provided background for the study. From a literature review, an attempt was made to select from other nations applicable principles as bases for proposing a training program designed to fit the Syrian culture. A program of training agricultural extension educators was proposed for the newly established College of Agriculture in Aleppo, Syria. The philosophy of education of Syria, the objectives of the College of Agriculture, and the policies of the Syrian government served as guidelines for the program's organization. An emphasis was placed on preservice and inservice training.

- *161 IDENTIFICATION AND ANALYSIS OF PROBLEMS AND POLICIES ASSOCIATED WITH STAFFING OF SELECTED UNIVERSITY--A.I.D. AGRICULTURE AND HOME ECONOMICS ASSIGNMENTS OVERSEAS. Troyer, Donald Robert. Wisconsin Univ., 64-3246, MF \$4.10, HC \$14.40, 319p., 64.

The study was to identify policies and problems related to staffing University-AID (Agency for International Development) Contract projects overseas, and job satisfactions and dissatisfactions of those who have worked overseas. Data were obtained by 84 personal interviews at four universities that have had agriculture and/or home economics contracts with AID. One group of respondents had served overseas; a second group had not; and the third group were administrators with responsibility for staffing overseas positions. The major administrative problem was in locating and assigning persons; other problems were the lack of financial support for certain phases of overseas contract programs, and the interruption of professional work. Dissatisfaction with overseas work was caused by problems of organizational policy and administration and lack of achievement; satisfaction was the result of recognition of one's work.

- *162 IDENTIFICATION OF PROFESSIONAL TRAINING NEEDS OF AGRICULTURAL EXTENSION AGENTS IN WESTERN NIGERIA AS A BASIS FOR DEVELOPING A COLLEGE TRAINING

CURRICULUM. Williams, Saudiq Kolawole Taiwo. Cornell Univ., 67-3797, MF \$3.00, HC \$8.40, 185p., 67.

This study identified professional training needs of extension agents in Western Nigeria as the basis for a curriculum at the college level. Using the critical-incidents method in personal interviews, 175 behaviors were collected from 115 agents in five levels of position in the Ministry of Agriculture. The 565 behaviors extracted from critical incidents represented 95 behavioral elements which were classified into five major categories of: creating appropriate teaching learning situations for clientele; planning, organizing and implementing extension programs and projects; demonstrating interpersonal relationships with staff members within extension and outside agencies; working with groups of clientele; and conducting and organizing training programs for co-workers and clientele. It was found that extension agents require training in specific aspects of the extension educational process, behavioral sciences, and agricultural technology. Data also suggested that extension programs are formulated without active participation of program clientele, or agents who implement them. Recommendations for use of research findings in job analysis and description, construction of evaluating instruments for agent performance, and planning of inservice programs are suggested.

- *163 TRAINING INTERESTS, IMPORTANCE GIVEN TO TRAINING, AND OTHER RELATED FACTORS IN ADULT EDUCATION IN PUBLIC AGENCIES OF PUERTO RICO. Marciano-Blanco, Rafael. Indiana Univ., 66-3122, MF \$3.00, HC \$9.25, Ed.D. thesis, 203p., 65.

The main purposes of this study were to identify a common core of training interests in professional adult education among practitioners in public agencies of Puerto Rico, and to determine how important certain professional areas were for the training of practitioners. Random samples consisting of 480 practitioners (change agents), and 54 supervisors, were taken from 24 selected agencies. Data were obtained from these, 28 official leaders from the central offices of the agencies, and government documents. Change agents and supervisors had similar high training interests in all the topics under ten professional adult education areas. Two of the factors related to the high interest revealed in professional adult education areas were the high expectations placed on education by the Puerto Rican society, and the wide scope of the agencies' work with adults. Among the change agents and supervisors, 8.2% and 22% respectively reported participation in credit university courses in adult education, and among both groups 23% reported participation in non-credit adult education training.

See also: SECTION 1890 RELATIONS WITH GOVERNING, ADVISORY GROUPS; 6700 AGRICULTURAL EDUCATION; 7600 COOPERATIVE EXTENSION; Item 119 effectiveness of film and bulletins in training 4-H leaders; 200a objectivity of extension agents in evaluating educational work

4750 OTHER AGENCIES

- *164 THE CONTRIBUTIONS OF SELECTED RECIPIENTS OF THE FUND FOR ADULT EDUCATION GRANTS IN PRODUCING NEEDED LEADERSHIP IN THE PROMOTION OF LIBERAL ADULT EDUCATION. Kouzoujian, John. Michigan State Univ., 65-14,237, MF \$3.00, HC \$7.60, 163p., 65.

This study sought to assess characteristics of recipients of Fund for Adult Education grants; their subsequent role in providing leadership for the adult education movement; relationships between program intent and the actual outcomes realized by recipients; and the quality of their academic preparation for fulfilling necessary leadership roles. A questionnaire was completed by 142 recipients. All had master's degrees, 57% had doctorates, and 61% had completed their most recent graduate work in adult education. A review of professional and community roles, attitudes, and other factors supported the view that the grant program was very successful in promoting adult education. Respondents reflected a positive self-appraisal of their academic preparation in educational philosophy and psychology, leadership utilization, and other aspects of adult education. A need was seen for further study of the fellowship program, recent adult education graduates, curricula at selected universities, and present and projected leadership needs.

- 165 THE APPLICATION BLANK AS A PREDICTIVE INSTRUMENT FOR THE SELECTION OF PART-TIME TEACHERS IN AN EVENING COLLEGE. Heilig, Harland E. Rutgers-The State University, 64-1228, MF \$2.75, HC \$8.20, Ed.D. thesis, 177p., 63.

The correlation between application blank data and teaching success was investigated, using a sample of 272 part-time evening college teachers during the school year 1960-61. The criterion was the department chairman's judgment of teaching success. The predictors were data from application blanks for the staff as a whole and for ten departments individually. Characteristics related to teaching success for the staff as a whole were teaching experience, military rank, graduate degree status, professional group affiliations, number of college degrees, and attendance at undergraduate college away from the secondary school community. Age when hired, teaching experience, professional society membership, publication, and military rank were the most frequently occurring predictors of success in individual departments, although the sign of correlation differed among departments. It was concluded that: there were specific characteristics for individual departments; the more successful teachers were more alike in all characteristics than were the less successful; characteristics accepted as predictors of teaching effectiveness did not apply in some departments; and each department chairman should select his own part-time teachers.

- *166 FACULTY COMMITMENT TO UNIVERSITY ADULT EDUCATION. Dekker, Tunis H. Chicago Univ., 193p., 65.

The purpose of this study was to examine the relevance of the continuing education task on the basic goals of the American universities in terms of the commitment felt by university faculties to the adult education concept. Three land grant institutions (University of Georgia, Michigan State University, and Purdue University) that were engaged in adult education conferences were chosen. Data were drawn from 194 university faculty members through a self-administered questionnaire and subjected to statistical analysis. The findings revealed: (1) no correlation existed between faculty orientation and academic location within the university; (2) a correlation existed between faculty orientation and the amount and frequency of conference involvement--the degree of involvement tended to increase with these factors; (3) faculty orientation was found to be independent of age, academic education, tenure, status, length of appointment in present position, time devoted to teaching, and time devoted to research. The study showed that faculty members in both the central and peripheral regions of the university participated in the university conferences for professional reasons.

- 167 A TEACHER RESOURCE ALLOCATION DECISION MAKING PROCEDURE FOR AN EVENING INSTRUCTIONAL PROGRAM OF A CALIFORNIA PUBLIC JUNIOR COLLEGE. Tayloe, Ralph Chester. California Univ., 67-11,708, MF \$3.00, HC \$6.20, Ed.D. thesis, 129p., 67.

A study was made of the specific cyclical sequence and detailed events needed to allocate available teacher resources to evening division courses at a California public junior college. Using data from interviews with participants and from other sources, a flow-chart model was made of the allocation procedure. Sequential activities were described as a part of one of three major segments of the total process: determining foundation courses; assigning resources to such courses; and controlling course enrollment. Findings included the following: (1) foundation courses receive the teacher resources, and are generally the same as courses offered in the last similar semester; (2) foundation courses grow to serve community needs by adding specialized courses or new class sections; (3) average relative instructor cost per student (Spring 1966) was 20.66 mills after six low enrollment classes were cancelled; (4) at the end of the six-week enrollment period, 86% of total capacity was in use, effective cost averaged 24 mills, and departmental costs ranged from 17.75 to 45.87 mills per student hour for each dollar of instructor cost.

- *168 THE CONFERENCE DIRECTOR AS A BOUNDARY DEFINER OF THE UNIVERSITY. Deppen, Donald A. Chicago Univ., 130p., 65.

A study was done to develop and test a conceptual framework for examining university conference directors' role conceptions and to discover criteria by which they decide to accept, reject, or initiate requests or ideas for programs. Interviews were held with 45 directors in 19 northeastern states. The conceptual framework proved useful. Directors dealt with requests and ideas arising on both sides of the institutional

boundary, but they tended to be much more discriminating among requests that arose externally than among those from within the university. As regards role enactment, generative activity consisted almost wholly in "selling" faculty participation. On the basis of differences in criteria, opinions, beliefs, and major concerns, five basic types of conference directors were defined: (1) client-oriented, for whom the wishes of the people come first; (2) operations-oriented, for whom the process of planning and execution is paramount; (3) image-oriented, for whom the program is primarily a public relations tool; (4) institution-oriented, for whom the academic sanctions and standards of the university are paramount; (5) problem-oriented, for whom contact between university resources and social problems is the ultimate objective.

- 169 A STUDY OF PART-TIME INSTRUCTORS IN VOCATIONAL-TECHNICAL EDUCATION AMONG COMMUNITY COLLEGES IN MICHIGAN. Messerschmidt, Dale Harvey. Michigan State Univ., 68-4191, MF \$3.00, HC \$6.40, 135p., 67.

The purpose of this study was to determine the practices used by community colleges in the State of Michigan to recruit, hire, and prepare part-time instructors in vocational-technical education, and to compare certain attitudes on six selected variables. Administrators of programs at twelve colleges were interviewed and the Minnesota Teacher Attitude Inventory and a personal data sheet administered to 327 instructors employed by the community colleges. Results from the interviews showed, among other things, that local business and industry were the primary source of part-time instructors for community colleges, and that topics which instructors wanted in inservice education included teaching methods, examination item writing, lesson plan preparation, and the philosophy of the community college. Tests of hypotheses concerned with the instructors' attitudes toward students showed that the length of teaching experience and course work in education had an effect on the attitudes of part-time instructors but no effect on the attitudes of full-time instructors; the age at which part-time and full-time instructors started teaching had no effect on instructors' attitude toward students.

- 170 PROCEDURES FOR THE SUPERVISION AND EVALUATION OF NEW PART-TIME EVENING-DIVISION INSTRUCTORS IN CALIFORNIA JUNIOR COLLEGES. Heinberg, Sylvester. Univ. of Southern California, 67-405, MF \$4.00, HC \$14.20, Ed.D. thesis, 311p., 67.

This study analyzed inservice programs by California junior colleges for training part-time staff members of evening divisions. In the 63 reporting colleges, 66.9% of evening division staffs were part-time; and evening division directors had a responsibility for supervising and evaluating them. All but two of the directors had master's degrees; only 14 had doctorates. The majority of directors had taught or administered in junior colleges; 30% had been department or division heads. The majority of colleges were making wide use of recommended screening, selection, and

orientation procedures, but few practiced recommended supervisory and evaluative procedures. Recommendations include adequate released time and funds for department and division heads to supervise and evaluate the work of new part-time evening division instructors; control of the growth of evening divisions; joint responsibility by the evening director and the vice-president in charge of instruction for staff supervision and evaluation; and minimum criteria of education and administrative experience for selecting future evening division directors.

- 171 STAFFING THE EVENING COLLEGE: A STUDY OF TWELVE INSTITUTIONS IN THE MIDDLE ATLANTIC REGION. Sager, Garrett A. Wisconsin Univ., 63-3963, MF \$3.95, HC \$13.95, 307p., 63.

Six aspects of staffing--selection, orientation, promotion, faculty in-service growth, salary administration, and evaluation of faculty-- were studied through questionnaires and follow-up interviews at 12 evening colleges in the Middle Atlantic Region. Many principles advocated in the literature were found in common use (including using standard personnel application forms, holding personal interviews prior to appointment, providing orientation handbooks, developing simple salary schedules, determining promotion on an ad hoc basis, and evaluating faculty via informal and indirect methods) but many more were not. The functions of most evening colleges studied were ambiguous, sometimes unrelated to the aim of providing college-level education for adults. Staffing conditions were characterized by confusion over the roles of day and evening officials, by lack of awareness of the complexity of the staffing process, by failure to divide and assign authority and responsibility, and by scarce and inadequately written policies. Staffing was most effective in those evening colleges which had nuclei of full time evening faculty members; were organized into departments responsible only to the evening dean; and devoted their undivided attention to evening college affairs.

- 172 THE UNIVERSITY EVENING SCHOOL OF THE UNIVERSITY OF TENNESSEE: FACULTY OPINIONS AND TEACHING PERFORMANCE. Bills, Sam Crutcher. Tennessee Univ., 68-3728, MF \$3.05, HC \$10.60, Ed.D. thesis, 235p., 67.

A survey form returned by 381 faculty members and a teacher performance checklist completed by 780 students supplied faculty opinions of the University Evening School of The University of Tennessee and students' ratings of performance of Evening School teachers. The faculty favored the Evening School; thought credit, noncredit, and certificate programs desirable, and three one-hour class meetings most effective; and favored advising students and orienting teachers. They felt evening classes were more interesting (but not easier to teach) than day classes and favored overload teaching. They did not believe the Evening School should administer all evening classes or that it should be self-supporting. Students gave instructors and part-time teachers highest effective-ineffective teaching rating ratings and graduate assistants lowest. In the overall ratings, professors were rated highest and graduate assis-

tants lowest. Overall ratings by student classification differed between freshmen and upperclassmen at the .01 level. (Implications were drawn for more efficient operation of the Evening School. The document includes 60 tables, a bibliography, and the survey instruments.)

- 173 STAFF NEEDS FOR PLANNING IN-SERVICE EDUCATION PROGRAMS IN ADULT TRADE-TECHNICAL INSTITUTES. Chambliss, Kenneth M. Texas A and M Univ., 67-4699, MF \$3.00, HC \$10.15, Ed.D. thesis, 221p., 66.

As a basis for planning programs of inservice education for technical institutes and industrial education centers of North Carolina, a study was made to determine the needs for assistance felt by trade-technical instructors, related instruction teachers, and trade-technical administrators. A personal opinion and a fact-finding questionnaire were used. Instructors selected assistance needed from four categories--administrative leadership, supervision, instruction, and clerical help; administrators selected from six categories. On the basis of findings, it was recommended that the State Department of Community Colleges should set up guidelines; provide more institutes, seminars, and extension training; provide consultants; help administrators implement programs of inservice education; encourage written job descriptions; set academic standards for trade-technical instructors and related instruction teachers; and establish a system-wide trade-technical society to promote education.

- *174 A STUDY OF SELECTED EMPLOYEE DEVELOPMENT SPECIALISTS IN THE FEDERAL GOVERNMENT: THEIR BACKGROUND AND PERCEPTIONS OF THEIR ROLE AND ORGANIZATIONAL LOCATION. Ackerman, Leonard. George Washington Univ., 68-5520, MF \$3.00, HC \$7.40, Ed.D. thesis, 158p., 67.

The purpose of this study was: (1) to analyze perceptions of Employee Development Specialists in the Federal Government concerning their present role versus their ideal role and their present place in the organization versus their rightful place; and (2) to compare their background with that of personnel specialists in the Federal Government. According to a United States Civil Service Commission survey and the researcher's followup survey, the Employee Development Specialists, relative to the other group, had more education; were more active in professional societies and organizations; identified more with their agency and work group than with the personnel field; showed more educational interest and course enrollments; and were more concerned with teaching techniques, individual and group behavior, and current management theories than with procedural matters. Role descriptions by Employee Development Specialists were quite varied. It was recommended that the Civil Service Commission develop a meaningful role description for Employee Development Specialists; establish educational and experiential standards directly related to the demand of the role; and resolve the apparent conflict between these specialists and the personnel specialists.

- *175 STYLE OF ADULT LEADERSHIP AND PERSONAL CHARACTERISTICS DESIRED IN AN ADULT LEADER BY LOW SOCIOECONOMIC RURAL YOUTH. Apps, Jerold W. Wisconsin Univ., 67-4933, MF \$3.00, HC \$9.90, 219p., 67.

The purpose of this study was to determine factors related to the recruitment and training of volunteer adult leadership for work with lower socioeconomic rural youth in university extension youth programs. Specifically, the study was concerned with comparing rural youth of different socioeconomic statuses as to their perception of personal characteristics in an adult leader, and style of adult leadership desired. The sample was 5th through 8th grade youth, 176 of lower socioeconomic status, and 174 of higher socioeconomic status. Socioeconomic status was measured by education and occupation of the head of the house, and family possessions. Style of leadership was determined by asking the youths to select either a democratic, laissez-faire, or authoritarian type of leader. Personal characteristics were determined by the youths' description of what they wanted in a leader, six categories being provided--skills and talents, social skills, kindness and helpfulness, respect for young people, physical characteristics, and authoritativeness. The conclusions revealed that rural youth, regardless of status, wanted the personal characteristics of kindness and helpfulness, and a democratic style in an adult leader. Other conclusions were based on differences in age, sex, grade level, and socioeconomic status of the rural youth.

- *176 A DESCRIPTIVE SURVEY OF TEACHERS OF PRIVATE TRADE AND TECHNICAL SCHOOLS ASSOCIATED WITH THE NATIONAL ASSOCIATION OF TRADE AND TECHNICAL SCHOOLS. Johnson, Elouise L. George Washington Univ., 67-16,191, MF \$3.00, HC \$6.80, Ed.D. thesis, 145p. 67.

Through a three phase study--literature review, examination of state qualifications for teachers in private trade schools, and a questionnaire survey of teachers in the 107 members of the National Association of Trade and Technical Schools--a profile of the trade school teacher was drawn. He is male, 36 to 55 years old, enters teaching by direct recruitment after at least eight years work experience, is active in curriculum and test development, and uses a variety of visual aids. He has two classes of 30 students each. Two-thirds teach full-time, work 32 hours a week and spend seven hours of personal time in preparation. High school was completed by 99 percent, while 62 percent had one or more years of college. One-fourth are currently taking trade or teaching methods courses. Thirty teachers reported more than 20 years teaching experience, 123 more than ten years, and 78 one year. Pre-service teacher training was usually obtained through supervised teaching. The questionnaire was returned by 726 teachers, representing 40 percent of the 1,674 teachers and 61 percent of the schools surveyed. (Document includes summary of state statutes, data tabulations, a bibliography, and research recommendations.)

- *177 FACTORS RELATED TO THE EFFECTIVENESS OF TEACHERS OF SHORT-TERM ADULT VOCATIONAL COURSES. Jones, Charles Irving. Florida State Univ., 67-11,161, MF \$3.00, HC \$8.60, Ed.D. thesis, 190p., 67.

Data obtained from 44 vocational teachers and 519 adult students included measures of student verbal gain, manual gain, satisfaction, and persistence, and of teachers' educational level, experience in teaching adults, years of trade experience, age, mental ability, subject matter knowledge, teaching style, and number of teaching techniques used. The teacher's mental ability, age, and teaching experience were not positively correlated with student satisfaction, persistence, and verbal and manual gain. Verbal and manual gain were correlated with teacher's subject knowledge. Teacher's educational level was negatively correlated with student satisfaction and years of trade experience was negatively correlated with persistence. Teaching style and number of teaching techniques used did not influence students. Student manual gain was positively correlated with verbal gain and negatively correlated with satisfaction and persistence. It was recommended that scores on skill development tests be a major criterion in the certification and selection of teachers of adult vocational courses where student verbal and manual gain are objectives. Administrators should select course objectives before selecting teachers.

- 178 THE QUALIFICATIONS AND EDUCATIONAL NEEDS OF INDUSTRIAL TRAINING DIRECTORS. Gossage, Loyce Clyde. California Univ., 67-14,261, MF \$4.90, HC \$17.35, Ed.D. thesis, 383p., 67.

This study investigated the hypothesis that industrial training directors are required to perform educational duties for which they lack appropriate, organized instruction. Questionnaires were sent to 778 principal training directors, of whom 238 responded. Data were obtained on sizes of firms represented, numbers of trainees served, employment standards for training directors, job titles of training directors and their immediate superiors, employment experience and training and development background, subordinate staff, major duties, educational background, self-perceived educational needs, and the educational and work background (including general and specific courses in education, business, communication, and psychology) which the respondents considered desirable for their successors. Only a third had master's degrees in business or education. Assessing present and proposed training activities and coordinating company training were named as the most important duties. Respondents tended to believe that certain duties could be learned only on the job; however, the greater the number of trainees, the more likely a respondent was to prefer that his successor had an advanced degree in business and/or education.

- 179 AN EXPLORATORY STUDY OF ADULT HOMEMAKING EDUCATION IN RELATION TO TEACHER PREPARATION AND PROGRAM PLANNING. Nunn, Helen Cleola Robinson. Cornell Univ., 66-7843, MF \$3.00, HC \$6.20, 126p., 66.

This study investigated the relationship of vocational home economics teachers' backgrounds (level of education, higher educational preparation to teach adults, vocational teaching experience) to effective program planning, teacher evaluation, procedures, and effectiveness of

teaching as measured by dropout rates in adult homemaking classes. Questionnaire respondents were 200 vocational home economics teachers in Arkansas who had taught at least one adult. These were among the findings: (1) the most effective teachers were flexible in program planning and teaching methods, sensitive to the progress of their students, skillful at obtaining useful feedback, and responsive to the needs of the particular group; (2) these teachers depended on their own teaching abilities rather than those of resource persons; (3) formal education showed little correlation with effective program planning and teacher evaluation, and the background variables as a whole contributed to effectiveness only if teachers had learned appropriate methods of program planning and evaluation. A need was seen for preservice and inservice education incorporating practical experience working with adults.

- 180 A STUDY OF THE ROLE OF PROFESSIONAL LEADERS IN EDUCATIONAL PROGRAMS FOR PARENTS HANDICAPPED BY SOCIOECONOMIC STATUS DIFFERENCES. Naq, Uma. Missouri Univ., 67-2912, MF \$3.35, HC \$11.70, Ed.D. thesis, 259p., 66.

The study's primary aim was to identify and compare concepts of the actual and ideal roles of the professional leader as held by a select group of professional leaders and program directors. Q-technique as developed by Dr. William Stephenson was used. Professional leaders and directors (58) were requested to rank order the statement cards in terms of an 11-point scale indicating the degree of importance accorded the activities within actual and ideal roles. Correlation and centroid factor analysis were used. Findings revealed variance in the role expectations of the professional leader; however, differences were largely a matter of degree. The two major groups of respondents were not clearly separated on factors. The greatest differences centered around four major patterns of opinions and concepts expressed by Q-sorts with respect to professional leader role. The viewpoints were considered distinct from one another. There was considerable agreement on certain job activities among all respondents who expressed agreement in consensus statements. Findings substantiate the conclusion that Q-methodology was useful in identifying factors which represented beliefs.

- *181 A STUDY OF GIRL SCOUT LEADERSHIP TRAINING: NON-PROFESSIONAL LEADERS OF ADULTS AS CONTINUOUS LEARNERS. Stenzel, Ann Katherine. California Univ., 64-2139, MF \$3.55, HC \$12.40, 275p., 63.

Research identified characteristics of effective Girl Scout volunteer trainers and developed criteria for determining effectiveness. Twelve problem situations, secured through a critical-incident technique, tested evaluative judgment and were scored for problem identification. Forced-choice questions tested content versus group orientation. Seventy-five trainers and 500 of their trainees in the San Francisco Bay area participated in various phases of the study and a small-scale experiment was conducted using a self-help instrument called "my continuous learning plan." Eighty-eight percent of the trainers were

classified as a mixed leadership type concerned with program content and group processes. Low scoring trainers had experience with only children, while high scoring trainers had varied Girl Scout teaching and participation in training events, a college degree, and career experience. Those participating in the continuous learning plan showed a greater change in score than the control group. One conclusion was that a learning-oriented approach to group leadership is the critical prerequisite of the volunteer leader of adults. (An historical chapter on Girl Scout adult leadership training from 1912 to 1962 is included.)

- *182 A STUDY OF THE RELATIVE EMPHASIS PLACED ON CHRISTIAN ADULT EDUCATION TASKS BY MINISTERS AND LAY WORKERS IN METHODIST CHURCHES OF THE INDIANA CONFERENCE. Crawford, Aubrey Allen. Indiana Univ., 64-1672, MF \$2.75 HC \$7.00, Ed.D. thesis, 149p., 63.

To assess present task-goal emphases and compare them with the desired or ideal emphases of ministers and volunteer leaders in Christian adult education, a Q-sort of 56 statements was devised and administered to 92 lay workers in 23 churches of Indiana Methodism. An index of the relative importance of task goals (content instruction, inspiration and social reinforcement, social understanding and action, evangelism, role definition and personal growth, churchmanship and leadership development) was produced. Findings included: (1) while ministers and lay workers agreed within their own groupings as to the emphasis various task goals were receiving, there were significant differences between the two groups; (2) the lay workers, but not the ministers, were generally satisfied with the existing emphases; (3) age, educational level, and church size affected the emphasis placed on certain task goals; (4) lay workers tended to place primary emphasis on the climate and evangelistic tasks, while the ministers tended to stress social action and personal growth tasks; (5) significant differences were found between ministers and volunteer workers as to the degree of desired emphasis in the inspirational, social action, personal growth, and evangelistic task areas.

- *183 COMPETENCIES IN ADULT EDUCATION OF SELECTED EPISCOPAL PRIESTS, WITH IMPLICATIONS FOR THE SEMINARY CURRICULUM. Croft, Frederic Ashbrook. Indiana Univ., 65-3472, MF \$3.00, HC \$8.60, 187p., 64.

This study sought to identify and analyze the adult education competencies (knowledge of adult characteristics, use of suitable teaching techniques, knowledge and use of educational goals and objectives and evaluation practices) of selected Episcopal priests, and to determine implications for the training of priests either in the seminaries or in adult education institutes and training programs. A questionnaire survey was made of 378 priests in the 30-40 age bracket, of whom 70% responded. Conclusions were that the priest is the key figure in much of the educational activity of the parish but is poorly trained for his educational task; that he depends too much on lectures with question and answer periods; that the priest is insecure in teaching adults and uninformed on the nature of the adult learner; and that seminaries

are not doing an adequate job in training priests in adult education. Further research and adult education training in seminaries, revision of the present Canon on Christian education, and more financial and training assistance from the National Department of Christian Education, were needed.

- *184 AN ANALYSIS OF SEMINARY COURSES SPECIFICALLY DESIGNED TO PREPARE SEMINARY STUDENTS TO ASSIST ADULTS TOWARD CHRISTIAN MATURITY THROUGH THE ADULT EDUCATION PROGRAM OF A LOCAL CHURCH. Leyboldt, Martha. Indiana Univ., 65-2378, MF \$5.95, HC \$21.20, Ed.D. thesis, 468p., 64.

This study aimed at the nature of, historical significance of, and reasons for adult education courses in the seminary curriculum. Examined were the perceived significance of the content of these courses, and the areas of instruction which, according to a comparison of the findings of the study and criteria developed by a panel of experts, needed improvement. The panel of experts presented two criteria for the resources to be used in the course of Christian adult education and the professors of twelve selected seminaries chose resources that were applicable to the achievement of the stated objectives. Forty-seven of the 88 accredited seminaries in the United States and Canada offered a course in Christian adult education. Four areas of concern needed strengthening in the adult education training courses in the twelve seminaries selected for intensive analysis. Nine kinds of class organizational patterns were used by the twelve professors whose work was analyzed intensively. The topical approach and the dealing with issues or problems were the two approaches used most frequently.

- *185 A CONTENT ANALYSIS OF THE FIRST NATIONAL CONFERENCE ON ADULT JEWISH EDUCATION. Feinstein, Sara. Columbia Univ., 68-5533, MF \$4.50, HC \$16.00, Ed.D. thesis, 352p., 67.

Based on a set of propositions for maintaining individual group culture this study examined the outlook of adult Jewish education practitioners. A limited survey of adult Jewish education revealed certain needs and problems, and a national conference was convened to discuss the findings. Tape-recorded statements by speakers and workshop participants were subjected to content analysis, and a classification system for these data was constructed. Certain stated assumptions were tested regarding relative emphases in the statements. It was concluded that the practitioners tended to be aware of individual participant needs and did not hold a single-minded attitude on transmission of the cultural heritage. Knowledge as a single variable was far less dominant than expected. A strong tendency to emphasize content was greatly modified by the tendency to use knowledge to increase identification and commitment. There was less emphasis on the function of adult Jewish education in a pluralistic society. Variations in workshop topics were reflected in varied emphases; relative emphasis was consistent with known beliefs of speakers; and insights into their attitudes could be made by inference from their assertions.

- *186 MINISTERS' PERCEPTIONS OF THE RELEVANCE FOR PARISH ADMINISTRATION, ORGANIZATION, AND TEACHING OF SELECTED ADULT EDUCATIONAL COMPETENCIES. Ph.D. thesis, Donald Miller. Boston Univ., 66-14,777, MF \$5.15, HC \$18.25, 401p., 66.

This study sought to determine if particular adult education competencies are seen by ministers as relevant for their work as organizers, administrators, and teachers in the parish. Sixty United Church of Christ ministers in greater Boston ranked 20 competencies and 20 control items in relation to one of the three roles; noted when they first perceived the importance of the items; and indicated their feelings as to the priority of the competencies (must have, would like to have, not interested). In 19 out of 60 judgements, specific abilities were seen as significantly more important to one role. All competencies were judged more important than paired control items representing traditional church approaches. Continuing education opportunities were as attractive to recent seminary graduates as to less recent graduates, but the recent graduates rated the competencies slightly more highly than their more experienced colleagues. Ministers with clinical training did not rate the competencies significantly higher than other ministers. Competencies recognized during and before seminary were ranked higher than those recognized later. However, much readiness for adult education during parish experience was also indicated.

See also: SECTION 0550 BIOGRAPHY; Item 83 programmed instruction in training Baptist adult leaders; 492 trainer role in Indiana Plan Institute; 425 selection, training of recreational leaders; 272 faculty in North Carolina university extension

4100 ADMINISTRATORS

4110 COOPERATIVE EXTENSION

- *187 AN ORGANIZATIONAL MODEL FOR THE INTEGRATION OF EXTENSION SYSTEMS IN THE STATE OF OREGON. Frizzell, John Kitchener. Wisconsin Univ., 66-9906, MF \$3.65, HC \$12.85, 283p., 66.

This study was done (1) to determine attitudes of key personnel in both the Division of Continuing Education (General Extension) and the Cooperative Extension Service in Oregon toward an extension service merger per se; and (2) to design and determine a suitable model for integration and to ascertain attitudes toward this model. A normative survey technique was used, and involved two Likert-type Attitude Scales. The main principles used to structure the merged extension organizational model were the coordinative, scalar, functional, and staff and line principles. Cooperative Extension key personnel were slightly less favorable toward merger per se and toward the model than were the Division of Continuing Education key personnel. On both items, variability in total scores was greater among Division of Continuing Education key personnel than among Cooperative Extension key personnel. Of all respondents, 85.51% expressed a favorable attitude toward merger per se, and 79.71% expressed themselves favorable on the merged extension organizational model.

- *188 ANALYSIS OF THE ADMINISTRATIVE ROLE OF THE COUNTY EXTENSION DIRECTOR IN CALIFORNIA. Abdullah, Fawzi Mahmoud. Wisconsin Univ., 64-9661, MF \$3.70, HC \$13.05, 287p., 64.

The study aimed at defining and analyzing the role of the county extension director in California as viewed by representative members of the California staff; and providing information for the recruitment, selection, and training of persons for this position. Data came from 87% of 241 extension personnel who answered a mail questionnaire consisting of 50 responsibility and 82 activity items classified under eight administrative processes. Each respondent indicated the relative importance of the individual role items on a six-point scale. A comparison of the findings of this study was made with information obtained from similar studies done in Michigan, Puerto Rico, and Wisconsin. Respondents perceived "educational leadership," such as developing and maintaining ability to work with people, as the primary function of the county extension director. The most significant roles of the extension director were perceived as: organization and policy; business management and finance; personnel management; and direction and coordination. There was a strong agreement between the total respondents in California and Michigan on the perception and ranking of the eight administrative processes, but substantial disagreements were found with respondents of Puerto Rico.

- *189 THE FUNCTIONS AND ROLE EXPECTATIONS OF DISTRICT DIRECTORS IN THE UNIVERSITY OF MISSOURI EXTENSION DIVISION. Heidlage, Walter Francis. Cornell Univ., 65-5719, MF \$3.10, HC \$10.80, Ed.D. thesis, 239p., 65.

This study analyzed the administrative role of district directors in the University of Missouri Extension Division in six job areas -- training new personnel, inservice training, professional improvement and relationships, finance and procedures, extension educational programs, and personnel and program evaluation. Data were obtained by questionnaires from the total (499) personnel of the division, with 87% responding. Among functions considered most important were: provide training for new personnel, maintain good communication among county staff, help the county council visualize an adequate extension program, and maintain good relationships with members of state and federal legislatures. Opinions varied among positional groupings; district home economists and the department chairmen showed the least agreement. The preferred role of the district director was that of stimulator; the role of superior officer was considered appropriate only in performing functions relating to extension policies and personnel evaluation.

- *190 A STUDY OF THE STATE PROGRAM LEADER POSITION IN THE COOPERATIVE EXTENSION SERVICE WITH WISCONSIN EXTENSION STAFF MEMBERS. Quinn, Emily H. Wisconsin Univ., 64-3938, MF \$3.05, HC \$10.80, 236p., 64.

The purpose of this study was to determine the Extension staff members' expectations of the State Program Leader in the Cooperative Extension Service and the degree of consensus among staff members, concerning the state program leader's role. Following a review of relevant literature, a theoretical model for the role of the State Program Leader was developed. This model was submitted to a panel of 44 program experts for appraisal of its components. Then the perception of the items in the model was obtained through individual questionnaires and interviews with 196 Wisconsin Extension staff members. Major findings showed that there was strong support for the activities in the role model as a whole but there were variations in specific activities. Respondents assigned higher priority to activities concerning program formulation, maintenance, and coordination than those concerning program implementation and procedures in evaluation; and perceived the activities concerning state-level programs as the ones which should receive the greatest emphasis. Administrative and supervisory respondents indicated that activities which should receive top priority were also ones which were being performed satisfactorily by the program leader.

- *191 AN ANALYSIS OF DECISION MAKING PROCESSES USED BY COUNTY EXTENSION CHAIRMEN IN OKLAHOMA IN SELECTING EXTENSION PROGRAMS. Williams, Eugene N. Wisconsin Univ., 66-9986, MF \$3.00, HC \$7.80, 166p., 66.

This study was undertaken to explore factors and identify criteria which were used in guiding the decision making process followed by county Extension chairmen in Oklahoma in selecting educational programs. Statistical tests were conducted to determine the significance of the relationship between county chairmen following the decision making process developed and those chairmen rated high in the efficient use of available resources. The relationship was also tested between the ranking of designated factors on the decision to expand or initiate programs, ranking of designated criteria relative to selecting clientele groups with which to work, ranking of designated factors in determining priorities for county Extension programs, and the ranking of major obstacles in selecting programs by county chairmen rated high in decision making ability and those rated low. There is evidence, based on the test of relationship between decision making ability and efficient use of resources, that training in decision making would be profitable for county Extension chairmen who have responsibility for program selection. Lack of clearly defined goals and objectives was identified as the major obstacle to selecting county Extension programs by both high and low rated decision makers.

- 192 LEADER BEHAVIOR AND ITS RELATION TO INNOVATIVENESS OF COUNTY EXTENSION CHAIRMEN. Mehta, Ratan Chand. Ohio State Univ., 68-3027, MF \$3.00, HC \$6.80, 141p., 67.

The purpose of this study was to analyze the leader behavior of extension agent chairmen as incumbents of a leadership position in the Ohio Cooperative Extension Service and relate it to their innovativeness in

adoption of programming innovations. Sixty county extension agent chairmen who had occupied that position for three or more years in the same county constituted the respondent group. The paired comparison technique was used for ranking the agent chairmen on the relative degree of innovativeness on each innovation, and the Forced-choice Leader Behavior Description Questionnaire used to categorize agent chairmen on leader behavior dimensions of "initiating structure" and "consideration." Agent chairmen with above average leadership behavior on both the "initiating structure" and "consideration" dimensions were more innovative in adopting program innovations. Age, amount of formal education, tenure in extension, number of family dependents, participation in inservice workshops and conferences, and recency of assuming the position of County Extension Agent Chairman were not significantly related to innovativeness as measured by adoption of program innovations. Recent participation in graduate courses, and self-perceived role as innovator were positively correlated with program innovation.

- *193 THE LEADERSHIP FUNCTIONS OF THE STATE 4-H CLUB LEADER WITH EMPHASIS IN SELECTED WESTERN STATES. Monosmith, Rudolph Olney. Wisconsin Univ., 64-9683, MF \$3.25, HC \$11.25, 250p., 64.

The purpose of this study was to measure the importance attached by respondents to the leadership functions of the state 4-H leader as they are actually and ideally perceived at both the state and county levels. Leadership functions were considered to be formulation, development, implementation, and evaluation. Data were collected by questionnaire from 248 respondents in three position groups--4-H leaders, administrative-supervisory staffs, and subject-matter specialists. Weighted scores were assigned to each item to measure: perceived ratings of actual and ideal importance of the state 4-H Club leaders' functions at state and county levels, areas of competence, and training and experience needed. Findings included the following: in all cases the ideal perceived importance of the state leaders' functions were higher than actual importance; there were no significant differences in the actual and ideal perceived importance of the functions at the county level; and the three position groups disagreed significantly on 16 of the 19 tasks of the four leadership functions.

- *194 THE ADMINISTRATIVE ROLE OF THE COUNTY EXTENSION DIRECTOR IN MISSOURI. McNabb, Coy Gaylord. Ohio State Univ., 65-1202, MF \$2.85, HC \$9.90, 217p., 64.

This study is concerned primarily with the administrative role of the county Extension director in Missouri as perceived by county directors, other county staff, and the state administrative staff of the Extension Division, University of Missouri. Data for the study were obtained from a questionnaire completed by a stratified, random sample composed of 105 county Extension Staff members in thirty Missouri counties and from thirteen members of the state Extension administrative staff. The latter included the entire staff and was composed of five district di-

rectors and eight members of the administrative cabinet of the University of Missouri Extension Division. Some of the major conclusions were that there was a high degree of consensus among county directors, between county directors and the state administrative staff, and between county directors and the other county staff on a majority of the role expectation items. However, on certain specific items such as the perceptions of county directors and staff about participation in staff selection, there was a definite lack of consensus.

- *195 THE MOTIVATION OF COUNTY ADMINISTRATORS IN THE COOPERATIVE EXTENSION SERVICE. Clegg, Denzil Owen. Wisconsin Univ., 63-7594, MF \$2.75, HC \$9.45, 206p., 63.

A study was made to determine the motivational factors associated with the behavior of 58 county administrators who work in the Nebraska Cooperative Extension Service and are physically dispersed over an entire state or wide geographic area. The critical incident technique was used to interview them as to satisfying and dissatisfying work experiences. The work experiences were categorized as having originated either within or outside the formal organization. Overall findings were compared with those from industrial companies and a veterans' hospital. Major job satisfaction originated significantly more often with the external relations of the organization (clientele and interest groups), while job dissatisfaction originated significantly more often with the internal relationships of the organization (relations with superiors, subordinates, and organizational policies). Achievement in doing the work was the most important factor associated with improved satisfaction and performance, while unfair treatment was an important factor associated with impaired satisfaction and performance.

- *196 MEASUREMENT OF POSITIONAL INVOLVEMENT OF STATE HOME ECONOMICS LEADER IN ADMINISTRATIVE DECISIONS IN COOPERATIVE EXTENSION. Regan, Mary C. Wisconsin Univ., 63-3959, MF \$2.95, HC \$10.35, 227p., 63.

In this study of the involvement of state home economics leaders in administrative decision making, the guiding purpose was to develop dimensions for measuring such involvement and to assess how well the items constituting the dimensions measured certain relationships and variables. A questionnaire was developed around four dimensions--participation, communication, contribution, and ideal involvement--and a five-interval rating scale was devised. Respondents were 251 Cooperative Extension administrators in 48 states and Puerto Rico. Major conclusions included the following--degrees of involvement are a function of the types of involvement measured, views of involvement vary widely by positions (director, leader, other administrator) and by region, measures of state leader involvement tend to be associated with personal backgrounds, and directors view involvement far differently from persons in other positions. (The document includes appendixes, 40 tables, and 72 references.)

- *197 FACTORS ASSOCIATED WITH PROGRAM LEADERSHIP OF THE STATE LEADER OF HOME ECONOMICS EXTENSION. Craven, Ruby M. Wisconsin Univ., 64-3208, MF \$4.85, HC \$17.10, 378p., 64.

The rationale of this study, undertaken to increase understanding of the program responsibilities of the state leader of Home Economics Extension, is the assumption that leadership is facilitated: (1) when actual performance and role expectations of the state leader are clearly defined and agreed upon by three position groups (home economics specialists, administrators, and supervisors) and (2) when the state leader influences the activities of the Extension Service. A questionnaire was completed by 53 administrators, 73 supervisors, and 72 specialists in eight southern and north central states to determine actual and ideal participation of the state leader in four program areas-- policies and objectives, execution, determination, and evaluation--and to define relationships, if any, between background factors and program leadership. Respondents in four states were also interviewed. All groups expected more leadership than was provided. Degree of program leadership was associated with perceived responsibility for program, personnel, and use of funds, and with frequency of contact with the state leader. Supervisors desired less increased participation of the state leader in program activities than did administrators and specialists.

See also: SECTION 6700 AGRICULTURAL EDUCATION; 7600 COOPERATIVE EXTENSION

4150 OTHER AGENCIES

- *196 THE FUNCTIONS AND TRAINING NEEDS OF ADULT EDUCATION DIRECTORS IN PUBLIC SCHOOL SYSTEMS. Madry, Arthur Chester. Ohio State Univ., 64-6931, MF \$5.30, HC \$18.70, 415p., 63.

A questionnaire comprising 77 statements of functions, 33 competency statements, and questions as to problem areas was sent to 200 directors of public school adult education in order to identify the functions, role, and necessary skills and abilities of administrators concerned with elementary and secondary adult education. The 140 respondents rated each function as essential, highly desirable, acceptable, unacceptable, or inapplicable, and rated competencies on a similar scale. The chief problem areas included financial support, community relations, staff problems, program planning, and facilities, equipment, and materials. A basic understanding of program organization and administration, ability to establish wholesome relationships, and executive and supervisory ability were among the competencies rated highest. Major functions fell into 12 categories--organization and structure, program purposes, program planning and development, instructional services and materials, student personnel services, staff personnel, facilities and equipment, finance and business management, school community relations and promotion, community services, program evaluation, and research. (The document includes appendixes, 89 tables, and 110 references.)

See also: Item 460 role of non-credit adult education director in junior colleges

4300 EVALUATION

- *199 SURVEY OF PRESENT METHODS OF FOLLOW-UP OF PUBLIC POST-SECONDARY SCHOOL GRADUATES IN COOPERATIVE AND PREPARATORY VOCATIONAL PROGRAMS AND DEVELOPMENT OF A FOLLOW-UP. Goff, Maurice L. Wyoming Univ., Ed.D. thesis, 221p., 67.

A study was made to assess followup procedures for gathering information from graduates of public post-secondary vocational and technical programs, and to develop an effective procedure involving a minimum of time and money. The procedure developed in this study was designed to supply data requested annually by the U.S. Office of Education. Fifty state directors provided names of 168 local administrators using systematic followups, and gave suggestions for developing a procedure. Findings included the following: (1) followups were almost exclusively conducted at the local level; (2) of 134 local administrator respondents named by state directors as using systematic followups, 15.4% had no graduates; (3) the most common method (used by 30.5% of the local administrators) was to get data from students before graduation; (4) six state directors reported no systematic or reliable local followups; (5) a procedure, usable with either large or small groups, which could provide accurate information was used to some extent by 51.5% of the administrators. The study revealed some neglect in effective evaluation and ascertained objective limitations in constructing followup devices.

- *200 A Q-SORT INSTRUMENT FOR MEASURING ATTITUDES TOWARD THE EDUCATIONAL CONDITIONS OF THE INDIANA PLAN. Gordon, George Kenneth. Indiana Univ., 66-3118, MF \$3.00, KC \$9.25, 203p., 65.

The problem was to construct, validate, and test a Q-sort instrument consisting of 56 statements measuring attitude changes of individual participants toward the seven educational conditions of the Indiana Plan for Adult Education in the Church. The Q-sort was structured to represent conditions of the plan at two levels with four replications (7x2x4). Four populations were used to provide data on the instrument's reliability in a control group, its vulnerability to irrelevant response determiners, effects of participation in a training institute, and criteria associated with subjects well oriented to the plan. Trainers also nominated participants who had shown most and least change during the institute. Findings led to these conclusions: (1) the Q-sort did measure attitudes; (2) criterion subjects shared a common, distinctive pattern of attitudes toward the conditions of the Indiana Plan; (3) participation promoted significant changes in attitudes of participants; (4) the meaning of these attitude changes cannot be interpreted without further study, especially followup; (5) Q-sorts provide a means of studying phenomena of intrapersonal dynamics.

- *200a ASSOCIATION OF SELECTED VARIABLES WITH OBJECTIVITY OF PROCEDURES USED BY LOUISIANA COOPERATIVE EXTENSION AGENTS TO EVALUATE ACCOMPLISHMENTS OF EDUCATIONAL OBJECTIVES. Flint, Bruce. Wisconsin Univ., 66-13,788, MF \$3.00, HC \$7.60, 164p., 66.

This study focused on determining the levels of objectivity of procedures used by agents of the Louisiana Cooperative Extension Service to evaluate accomplishment of selected educational objectives. The population included 247 county agents who had developed and executed an educational program during 1965 and 16 selected administrative and supervisory personnel. Information was obtained from mailed questionnaires, agents' annual plans of work, and narrative reports. Measurement scales were devised to categorize evaluation procedures used by agents and to classify the level of accomplishment reported by agents in annual narrative reports. Differences were not large enough to be statistically significant between levels of objectivity of evaluation procedures used and amount of time spent by agents in receiving training, planning programs, executing programs, and evaluating accomplishments; different job categories of agents; and length of their service. Among other things it was concluded that: extension agents should limit their objectives; training should be given in evaluative procedures; and educational programs should be evaluated through objective procedures. The letters and questionnaire used in the study are included.

See also: Item 369 computer model for effectiveness of farm instruction; 353 cost benefit analysis of programs for disadvantaged; 277 cloze procedure for assessing reading comprehension; 86 testing one year later for delayed achievement

4600 EDUCATION OF PARTICULAR GROUPS

4620 AGE GROUPS

4625 YOUNG ADULTS

- *201 A STUDY OF SELECTED BACKGROUND FACTORS AND THEIR RELATIONSHIP TO PARTICIPATION IN AND ATTITUDES TOWARD PARTICIPATION IN ADULT EDUCATIONAL ACTIVITIES OF YOUNG ADULTS FROM RURAL AREAS. Waldron, Mark Woodsworth. Wisconsin Univ., 68-7137, MF \$6.75, HC \$23.85, 227p., 67.

Part of a larger longitudinal study evaluating newly formed centralized school districts, this study was made to determine the relationship of certain background characteristics of young adults in rural Wisconsin to their participation in adult education and to their attitudes to such participation. The independent variables were. type of school district graduated from, intelligence and achievement scores in Grade 12, parental socioeconomic status, respondents' socioeconomic status, participation in voluntary youth organizations, parental levels of participation in voluntary organizations, personal and social behavior inventory scores, and levels of formal education beyond high school. Adult education participation and attitudes proved to be significantly

related to intelligence, total academic achievement, level of post-secondary education, and socioeconomic status; while graduation from reorganized districts correlated favorably, but not significantly, with higher participation. Lack of money and the self-impression of not being the studious type were the chief barriers to participation. Interest was strongest in vocational, technical, and business subject areas, and in regular high school and university courses. (Included are a bibliography, numerous tables, and the questionnaires used.)

- *202 AN ANALYSIS OF CERTAIN EDUCATIONAL AND SOCIOECONOMIC FACTORS AS THEY RELATE TO THE NATURE AND NUMBER OF 4-H PROJECTS SELECTED AND THE PROJECT PROGRESSION SHOWN BY 4-H CLUB MEMBERS AT GRADES ONE, SIX, AND NINE IN TEN WISCONSIN COMMUNITIES. Lidster, Echo Lenore Ruth. Wisconsin Univ., 63-7645, MF \$2.75, HC \$9.00, 197p., 63.

The study explored the relationships between certain educational and socioeconomic factors and the kinds, numbers, and degrees of progression of the 4-H club projects taken by boys and girls enrolled in the clubs in Wisconsin. Information was collected by 12 data gathering devices which were part of the battery of 19 used in the longitudinal study on school district reorganization from which this problem was selected. The study included 75 boys and 67 girls who, since grade 1, had been residents in 10 Wisconsin communities and who had been 4-H club members at some time during this period. The findings revealed significant differences (at the .05 level) among some of the mean scores in all three categories of kinds, numbers, and levels of progression of 4-H projects. There was a tendency for the boys taking the most projects and attaining the highest level of progression to be lower achievers in school. This trend was not evident among the girls. Girls in the livestock project had higher socioeconomic scores than girls in food and clothing projects; boys taking sheep and garden projects had lower socioeconomic scores than those in dairy, electrical and woodworking projects.

- 203 MIGRATION OF RURAL YOUNG ADULTS IN NEBRASKA. Orr, John David. Nebraska Univ., 68-3798, MF \$3.15, HC \$11.05, Ed.D. thesis, 243p., 67.

This study tried to determine the internal and external migration patterns as established by high school graduates of 1960, in rural Nebraska, and the association of educational, psychological, geographic, and economic factors with their migration and educational plans. Data for the study of the 4700 graduates were provided by almost 300 superintendents. The study revealed that even though Nebraska youth migrate to other states at the age when they are most productive, 44% of those studied were living in their home county in 1965. Also, rural graduates with higher scholastic achievement have a greater tendency to go to college and to migrate from their locale. Ruralness, density of population, and dependency upon agriculture, moreover, were seen to be associated with accelerated college education and migration from the

county. Close proximity of work opportunity in manufacturing had an inhibiting effect upon the tendency to migrate. Similarly, in agricultural work opportunities, where more cattle were on feed per square mile, graduates migrated less. The percentage of migration was greater where the soil in the area was unable to support intensified agriculture.

- 204 RELATIONSHIPS BETWEEN CERTAIN BACKGROUND FACTORS OF YOUNG ADULTS AND THEIR EXPRESSED ATTITUDES TOWARD SELECTED ETHICAL VALUES. John Bone, William Milton. Pittsburgh, 67-12,391, MF \$3.00, HC \$7.60, 162p., 67.

The relationship between background characteristics of young adults such as sex, marital status, parenthood, income level, age, educational background, occupational level, and church participation were studied as to their influence on the ethical values of marital fidelity, honesty, and goodwill. Of 400 young adults in 52 Protestant congregations in Western Pennsylvania, 175 responded to a personal data sheet and attitude inventory. Differences were found between single and married adults and sexes in respect to marital fidelity. Goodwill was higher among parents, with church participation having no influence on this value or on honesty. A significant difference existed among occupational groups concerning honesty, with college students having the lowest score. No significant differences were shown between the age groups, 19-27 years, and 28-36, in regard to any ethical values; between married young adults with children and those without, relative to marital fidelity and honesty; between the sexes, with references to honesty; between occupational groups, with respect to marital fidelity and goodwill; and between income level and educational background and attitudes toward all three ethical values. Findings of this study and of previous research indicate the complex nature of the field of ethics.

- *205 PARTICIPATION IN VOLUNTARY ORGANIZATIONS BY WISCONSIN RURAL YOUTH OF DIFFERENTIAL SOCIOECONOMIC LEVELS. Everson, Norman Oscar. Wisconsin Univ., 66-9903, MF \$3.05, HC \$10.60, 233p., 66.

This study sought to assess participation in voluntary organizations by rural youth of differing socioeconomic status (SES) levels, identify factors in participation, and determine whether rural youth differ by SES in reasons for joining or not joining clubs, likes and dislikes gained from participation, and features desired in a hypothetical youth organization. Subjects were 350 public school boys and girls, grades 5-8, in Adams County, Wisconsin. Criteria for SES were family possessions and the household head's education and occupation. Findings included the following: (1) higher and lower SES groups differed in participation, but not significantly; (2) reasons for joining or not joining were similar for both; (3) club members disliked club meetings and derived greatest enjoyment from opportunities to learn through individual projects and group activities; (4) parental feelings toward clubs were the main influence on participation; and (5) other factors in participation for both SES groups were parental leadership in youth groups,

mothers' participation in adult organizations, and influence of peers. Several family and related factors were significant at one SES level only.

- *206 THE EFFECT OF FARM MIGRATION UPON THE DEVELOPMENT OF 4-H CLUB PROGRAMS IN URBAN AREAS. Freeman, Theodore Roosevelt. Wisconsin Univ., 65-10,607, MF \$3.15, HC \$11.05, 244p., 65.

A study was made of the degree to which former farm dwellers were involved in the Four-H Club program in urban areas and the influence of their involvement on the programs. Questionnaires were administered to 266 leaders and 1,815 members residing in Kalamazoo, Michigan; greater Denver; greater Portland, Oregon; Jackson County, Missouri; DeKalb County, Georgia; and Nassau County, New York. Data were obtained on personal, social, and economic characteristics, program involvement, perceptions of programs, and participation in voluntary organizations. From analysis of data on program leaders, it was concluded that farm migrant participation in the urban program had both a positive and a negative effect. Migrants had been a major source of leadership, but their lower socioeconomic status and their traditional view of the program were inconsistent with the development of such voluntary organizations as the Four-H Club program. Therefore, leaders with farm experience were less capable of adapting the programs to an urban setting. Members with and without farm experience did not appear to differ significantly.

- *207 CONSISTENCY OF TEACHER RATINGS AND ACHIEVEMENT PATTERNS OF 4-H CLUB MEMBERS IN RELATION TO THEIR PARTICIPATION IN 4-H CLUBS AND OTHER ORGANIZATIONS IN GRADES ONE, SIX, AND TWELVE. Bholay, Dineshkumar Atmaram. Wisconsin Univ., 65-9223, MF \$3.00, HC \$10.35, 227p., 65.

An assessment was made of the consistency of student ratings by teachers and of Four-H Club members' achievement patterns in relations to participation in Four-H and other organizations in grades one, six, and twelve. The study included 284 children and youth who had continuing participation and were part of the total population of a longitudinal study in ten Wisconsin communities. Findings included the following: (1) ratings throughout the grades were not consistent; (2) organizational experience helped participants in their social and personal development and educational achievement; (3) Four-H members and members of other organizations did not differ significantly in educational achievement; (4) length of membership did not significantly differentiate the social and personal development of Four-H Club members. Further research was recommended on correlations between rating factors and standard personality tests, on Four-H Club objectives, and on the functioning of Four-H Clubs.

- *208 EDUCATIONAL AND OCCUPATIONAL PLANS AND ATTAINMENTS OF WISCONSIN'S RURAL YOUTH. Beals, Harold Dale. Wisconsin Univ., 65-9222, MF \$4.95, HC \$17.55, 388p., 65.

This study sought to summarize and integrate findings of a Wisconsin longitudinal study begun in 1956, and to determine differences between farm and nonfarm rural youth, between youth in five major fields of study in higher education, and between those in five occupational categories. Subjects were 764 male seniors in high school (1957), and 1,108 male high school freshman (1958). Questionnaires provided follow-up and continuity on the original data. Findings and interpretations included the following: (1) youth planning to farm plan earlier, have fathers with less education, and have lower mental ability levels than youth planning other occupations; (2) farm youth plan for and attend college at half the rate of nonfarm youth; (3) there was a reversal of enrollment trends in agriculture (1957-63) compared to mathematics, science, and engineering; (4) youth aspiring to management and the professions realize their plans to a greater extent than others except those planning to farm; (5) six years after high school 60% of the youth had migrated from their home communities, largely into the armed forces or higher education.

- *209 AN ANALYSIS OF PERSONAL-SOCIAL FACTORS AND INTEREST PATTERNS EXISTING AMONG 4-H MEMBER, 4-H DROPOUT AND NON 4-H BOYS AND GIRLS AT SIXTH, NINTH, AND TWELFTH GRADES IN SIX RURAL WISCONSIN COMMUNITIES. Barnes, Robert Franklin. Wisconsin Univ., 64-9662, MF \$3.65, HC \$12.85, 281p., 64.

Part of a longitudinal school district reorganization research project, this study analyzed differences in personal and social development and the formation of interest patterns among 165 boys and girls (Four-H members, dropouts, and nonmembers) living in six communities since the sixth grade. Data were collected at the sixth, ninth, and twelfth grades from sets of boys and girls matched by intelligence scores and parental socioeconomic status. No significant differences emerged among mean raw scores achieved on the California Test of Personality by either boys or girls in the member, dropout, or nonmember groups. Four-H dropouts had a significantly higher mean percentage of correct responses to items on the Feeling of Belonging subtest than either of the other groups. The matching procedure proved reasonable and valid. Results indicated a need for further research on effects of the Four-H Club on personal and social adjustment; for control, in all comparative Four-H research, of factors causing the program to be selective; and for reevaluation of some of the data-gathering instruments being used in the overall project.

- *210 THE RELATIONSHIP BETWEEN COMMUNITY SERVICE ACTIVITIES AND ADOLESCENT 4-H CLUB MEMBERSHIP IN WISCONSIN. Campbell, Frank Nelson. Chicago Univ., 175p., 63.

The inclusion of community service activities in a 4-H Club's program has a positive effect on retaining the club's members when they reach older adolescence. Fifty 4-H Clubs in five Wisconsin counties were studied to reach this conclusion. The twenty-five clubs with community service activities were found to retain a significantly higher percentage of their membership. Furthermore, projects which are highly satisfactory for a new ten-year-old member of a 4-H Club can be repetitious and uninteresting for the same boy several years later. The chance to undertake more individualized projects, and to share in leadership responsibility, are necessary to maintain the interest of older adolescents in club membership.

See also: SECTION 4010 LEADERS IN COOPERATIVE EXTENSION; Item 181 Girl Scout leader training; 175 adult leadership style desired by low income rural youth; 119 film and bulletin in training 4-H leaders; 10 self concept in young adults; 19 participation patterns of young adult males in Wisconsin; 30 guide for analyzing youth program planning processes; 344 effects of vocational education on career patterns of high school graduates; 464 minors in public school adult classes; 354 dropouts in Kentucky county; 237 social character of Spanish American young adults

4630 MIDDLE-AGED

See: Item 490 middle-aged in church adult education; 222 social roles of married middle-aged women; 221 activity patterns of middle class middle-aged women

4635 OLDER ADULTS

- *211 A STUDY OF THE RELATIONSHIP BETWEEN LIFELONG LEARNING AND ADJUSTMENT OF OLDER PEOPLE. Wolfe, Lloyd M. Michigan Univ., 63-5035, MF \$2.75, HC \$5.80, 119p., 63.

An investigation was made to discover a possible relationship between good adjustment in later years and learning during adulthood. An attitude scale (a standardized measure of adjustment), was administered to 251 men and women over 65 years, from which the highest and lowest 50 scores were selected for the study. The 100 participants were interviewed as to their adult activities which provided a learning experience--educational reading, adult education classes, or clubs--with some educational program. Good adjustment was significantly related to activities selected as educational, and to present sources of income and grade completed. Well-adjusted persons had incomes from private sources and had higher levels of formal education. Continued learning was not related to source of income, or school grade completed among those who had eight grades or less completed. More of the well-adjusted in the limited formal education group had engaged in selected learning activities. For those completing nine years or more of school, there was no difference between adjustment and learning. It was concluded that a relationship between adjustment of these older people and continued learning during adult years was indicated.

- 212 THE RELATIONSHIP OF WORK VALUES TO SATISFACTION WITH RETIREMENT AND FUTURE TIME PERSPECTIVE. Halpern, Doryan. Columbia Univ., 67-14,049, MF \$3.00, HC \$4.80. 93p., 67.

This study tested two hypotheses: (1) the importance attached to the intrinsic aspects of work is negatively related to retirement satisfaction, maximum extension of future time perspective (FTP), and the number of events anticipated in the future; (2) retirement satisfaction is positively related to FTP maximum length and events anticipated. Subjects were 65 white male retirees whose physical and mental health appeared normal and whose retirement income was adequate. Measures of work values and retirement satisfaction, and a blank for listing future events of importance, were used. Findings supported the first hypothesis but not the second. Two alternative interpretations, both relating to self-actualization need, were offered for the negative relationship between satisfaction and intrinsic work values. Findings based on un-hypothesized data suggested the importance of individual personality in determining retirement adjustment, and of cultural, socioeconomic, and personality factors (as opposed to chronological age alone) in determining FTP. A positive relationship was also found between FTP maximum extension and density. (A bibliography, questionnaires, and 29 tables are included.)

- *213 A BASE LINE SURVEY OF ELDERLY NON-INSTITUTIONALIZED PERSONS IN WYOMING. Ruthemeyer, Robert J. Wyoming Univ., Ed.D. thesis, 152p., 66.

The study aimed at obtaining information about Wyoming's elderly persons and their activities. The sample population comprised 108 individuals aged 65 years or older. Fifty were men; 58 women. The counties involved were stratified by three categories: (1) those having 11.5% or more of their population classified as elderly; (2) those having senior citizens constituting 6.0% to 11.4% of the total and (3) those having 5.9% or less of the population classified as aged. Survey data were collected during March, April, and May of 1964. The modal education of the sample of Wyoming's senior citizens was from the sixth to the eighth grade. A statistically significant relationship existed between formal education and income. Of the fifty-one persons having an income of less than \$2,499 per year, 67% had less than an eighth grade formal education. Reading was the most frequently mentioned leisure activity. About 95% of the respondents had a radio and, on the average, listened to it about two hours daily. Eighty-three per cent of them had television receiving sets and the average viewing time was three hours daily. Some time was also spent visiting friends.

- *214 OHIO SENIOR CITIZENS CENTERS. Stellman, Samuel David. Ohio State Univ., 63-6265, MF \$2.75, HC \$8.00, 175p., 63.

The study aims at combining the use of a comprehensive questionnaire, staff interviews, and a literature review to discover information which

can be used to establish guidelines for senior citizens' centers. Many centers have been initiated in communities because the need was obvious and often urgent. However, the lack of sound financial planning caused difficulty early in their developing stages. Financing of centers remains a major concern throughout the state. At present, in spite of the large number of aging people, there is still space in most centers for additional members. Most center members today are people in the lower income categories of the aging population, widowed, over 70 years of age, who have little education; the more affluent and "younger" aging do not use the senior citizens' centers to any great extent. The personnel operating these centers lack expertise in catering to their clientele and have been unable to interest their participants in adult education courses. However, recreational activities continue to be popular with those who attend.

- 215 POST-RETIREMENT ACTIVITY AND ADJUSTMENT TO OCCUPATIONAL RETIREMENT: A RE-EXAMINATION WITHIN A FRAMEWORK OF ROLE AND SELF THEORY. Janovy, David Lee. Nebraska Univ., 67-10,665, MF \$3.15, HC \$11.05, 242p., 67.

In this study of the relationship between activity after retirement and personal adjustment to occupational retirement, the importance of activity was seen as dependent on perceptions of the retirement role and on self-concepts. About 240 retired male residents of Sun City, California, furnished general background data and information on their participation in a broad range of activities, perceptions of the retirement role, self-concepts, and adjustment. Subjects were divided into two categories: those who viewed retirement in terms of work-related values; and those who viewed retirement in terms of leisure. It was predicted that good adjustment would be highly related to "instrumental-service" activity in the former group, and to "expressive-pleasure" activity in the latter group. On 11 tests of the prediction, zero-order analysis, together with adequacy of income and self-estimates of health, produced six positive, reliable findings. The theoretical position received moderate support and considerable clarification.

- 216 SOME EFFECTS OF A SKILL LEARNED IN YOUTH ON RELEARNING IN LATER MATURITY AND OLD AGE. Kiss, Rosalia Ann. Michigan Univ., 66-14,542, MF \$3.00, HC \$9.45, 206p., 65.

A study was made of the relative merits of recall and learning in providing older persons with a choice of activity. Data were collected on the knitting performance of 73 subjects. A form of pretest-posttest experimental design with nine subgroups was used. Subjects were grouped by age (45-65 versus 65 and over) experience with knitting (no experience, five to 15 years without practice, and 20 or more years without practice) and health (allegedly healthy subjects and those under treatment for chronic mental or physical disabilities). Tests were selected to measure finger dexterity, attitudes toward self, and attitudes toward learning. The evidence suggested five broad conclusions: (1) repetitious manual skills learned in youth may be reacti-

vated in later maturity and old age with relatively little instruction; (2) age may affect motor skill learning ability but have little effect on retention; (3) differences in length of interval without practice have little effect on long-term retention of motor skills by older persons; (4) attitudes toward learning and self bear little relationship to motor skill learning or relearning in older persons; and (5) other things being equal, chronic disability does not depress the learning or relearning ability of older persons.

- *217 FACTORS AFFECTING A PROGRAM FOR OLDER PEOPLE IN A LOW-INCOME RURAL AREA. Bohanan, Samuel Clifford. Cornell Univ., 63-4819, MF \$2.75, HC \$7.60, Ed.D. thesis, 161p., 63.

Using a sample of 314 men and 316 women in Casey County, Kentucky, this study investigated the economic and social conditions of persons 60 and over in a rural low-income area. Data on personal background, activities and participation patterns, attitudes, health, relationships, and living conditions were included. Most were married; 533 lacked education beyond the eighth grade; many household conveniences were widely lacking; over 85% of family incomes were under \$2,000; most family estates were under \$10,000. Radio, television, reading, and visiting were the main forms of recreation. Church membership was the only widespread form of group affiliation. Farming, social security, property rental, and state and county old-age assistance were chief sources of income. Over half rated their health as poor; and although 505 had had medical expenses during the previous year, only 131 carried health insurance. They generally had large families, and showed high independence; plans for retirement were few. Despite low incomes, few problems other than health were named. Extension programs were recommended that would meet the special needs of such older adults.

- *218 THE EFFECT OF A GROUP DISCUSSION PROGRAM IN A HOME OR THE AGED ON THE BEHAVIOR PATTERNS OF THE PARTICIPANTS. Mason, Wendell Dean. Indiana Univ., 65-2382, MF \$3.25, HC \$11.25, Ed.D. thesis, 250p., 64.

The effect of a group discussion program on the behavior patterns of aged participants was studied in the Indiana Masonic Home. The training program (18 one-hour sessions for six weeks), involved 44 residents (in two groups), ages 60-94, in discussions of applying effective learning conditions to adult education programs in homes for the aged. Data were obtained from five sources--a participant information sheet, pre-rating and post-rating schedules completed by the staff, personal evaluation sheets, seven-day diaries and self-appraisals of personal growth in teamwork. It was found that over half the participants had been living alone and had entered the home because of health problems. Watching television, and reading newspapers, magazines, religious and historical works, and mysteries were major activities. A positive philosophy of life was expressed. The teamwork checklist showed 43% of participants noted little personal growth, 27.3% much growth, and 11.7% no growth. Results indicate that older adults can achieve mean-

ingful learning, although no observable behavior changes emerged. Diaries proved ineffectual as evaluation devices. The thesis includes a bibliography, research review, rating scale, and definitions of techniques.

- 219 INSTRUCTIONAL CONDITIONS THAT PROMOTE ART PARTICIPATION BY OLDER PERSONS. Farris, Mary Lou Anne Miller. Pennsylvania State Univ., 64-5355, MF \$3.25, HC \$11.50, 252p., 63.

This study was concerned with determining instructional conditions that promote art participation by older persons, and exploring ways in which older adults react to art and the kinds of pictures they enjoy making. Four classes of adults were taught 90 minutes a week for 8 weeks. Two instructors taught a morning and an afternoon class. The sample of 8 men and 41 women was divided into two heterogeneous classes, aged 41 to 84, and two homogeneous classes. The experimental group consisted of 26 participants past the age of 60. The 49 persons in the total sample were pre- and post-tested using four types of measures: an Adjective Check List of 400 alphabetically arranged words in which subjects marked those considered to be self-descriptive; the Beittel Art Acceptance Scale; the Burkhart Object Question Test; and the art work produced. The 100% return of the followup letters mailed one month after the last class, revealed continued art experience and attendance at art exhibitions. About 60% indicated interest in attending another art class. The homogeneous grouping of older adults had a more favorable personality impact, and the heterogeneous grouping produced superior art work.

- 220 A COMMUNICATION PATTERNS STUDY OF RETIRED FACULTY FROM SELECTED MISSOURI INSTITUTIONS OF HIGHER LEARNING. Balanoff, Neal. Northwestern Univ., 67-4205, MF \$3.30, HC \$11.50, 253p., 66.

This study investigated communication patterns of retired faculty of Missouri colleges and universities. Questionnaires were completed by 75 persons (50 men and 25 women), of whom 50 (33 men and 17 women) were interviewed. Findings included the following: face to face communication was the favorite mode of communication, followed by telephone, books, television, radio, newspapers, lectures, and phonograph records; although radio was not high on the preferred list, retired faculty had established more fixed patterns of use for this medium than for any of the others studied; newspapers were the primary source of news; aside from conversation, respondents found more satisfaction in print media than in radio, television, or motion pictures. Other areas of discussion included sex, age, health, income, preretirement activities, community involvement, field of instruction, rank, degrees, other employment, home environment, and relative satisfaction with various media before or after retirement.

See also: SECTION 1200 AGE DIFFERENCES: Item 403 art education for retired; 475 industry practices in hiring retired military; 84 group discussion in home for aged; 71 effects of challenging and supportive

instruction in learning in older persons; 36 interview schedule for surveying older adults

4655 EDUCATION OF WOMEN

- *221 ACTIVITY PATTERNS OF MIDDLE CLASS WOMEN IN THEIR MID YEARS--WITH IMPLICATIONS FOR ADULT EDUCATION. Rosenstein, Betty L. California Univ., MF \$3.45, HC \$12.15, Ed. D. thesis, 266p., 67.

An investigation of the interrelationships of women, their life style and past educational experiences, was made of women between 21 and 72 years of age. Mailed questionnaires obtained data from 337 respondents on what they were doing and why, if they like what they were doing, and how past educational experiences influenced their activities. Most women were satisfied with their activities in homemaking and helping husbands. Other activities varied according to age and educational levels and were engaged in for personal satisfaction and gratification. Definite relationships were established between educational levels and continuing education plans, non-homemaking activities, and importance of roles outside of the home. Relationships were also found between college major and satisfaction with higher education, volunteer work, and nature of present occupation. Adult education attracted the most women in comparison with other educational experiences. Among the 46 to 50-year-olds, particularly, negative attitudes were observed toward all activities except jobs and helping husbands.

- 222 THE SOCIAL ROLES OF MARRIED MIDDLE-AGED WOMEN WITH IMPLICATIONS FOR ADULT EDUCATION. Canaday, Martha Helen. Pennsylvania State Univ., 67-5900, MF \$3.00, HC \$5.80, Ed.D. thesis, 116p., 66.

A questionnaire was completed by parents and prospective students (173 family groups), on campus for counseling, to assess women's role performance in four areas--wife, homemaker, mother, and individual person. The wife and homemaker roles appeared to be most easily perceived by all family members. The mother role was next and the individual-person score was lowest. Low scores were found on agreement of the performance of the roles which might indicate that although it is fairly easy to define each of the roles, their function is not as clearly seen. The findings indicated there was essentially no difference in the feelings of satisfaction for the women's role performance among the respondents. The only intra-family agreement score which showed a statistically significant relationship to demographic factors was between the wife-husband role satisfaction score and the husband's occupation. The consistently low scores in the individual-person role suggested that in the years devoted to family care these women neglected developing personal interests. Adult education programs could make a significant contribution by orienting programs to the needs of women in this age group.

- *223 A STUDY OF WOMEN INFLUENTIALS IN THREE MICHIGAN COMMUNITIES: THEIR ATTITUDES TOWARDS AND PERCEIVED ABILITY TO INFLUENCE ADULT EDUCATION PRACTICES. Brown, Anna Caroline Baker. Michigan Univ., 63-8140, MF \$4.25, HC \$15.10, 332p., 63.

Relatively standard sociometric procedures were used in three small Michigan communities to identify women said to have high influence. Data on participation, demographic characteristics, and perceptions of adult education were then obtained in personal interviews. Some major findings were that the influentials belonged to more than one association, had held offices or served on committees, and recognized the educational potential in their associations. The majority of top women influentials had not pursued formal adult education within the past year and seemed to feel that others needed it more than they did. Although knowledge of selected programs and activities varied according to experience and background, church education, library, and public school adult education programs were best known. The influentials were well educated, seemed willing to become involved in plans to increase educational opportunities for women, and although not so sure of their own influence, believed that other women leaders could exercise influence in regard to adult education.

- 224 PROBLEMS OF ADMINISTRATIVE CHANGE IN SELECTED PROGRAMS FOR THE REEDUCATION OF WOMEN. Addis, Margaret Emily. Harvard Univ., 67-9845, MF \$4.20, HC \$14.65, Ed.D. thesis, 325p., 67.

Nine educational institutions were studied through visits and interviews to find out their problems in the creation of programs for the reeducation of women. Six were in the East and three in the Midwest; they included public and private universities, technical and liberal arts colleges for women, residential and nonresidential, large and small. Though no problems were common to all, they were in the five major areas of resources, curriculum and instruction, administrative attitudes, faculty reactions, and student diversity, characteristics, and impact on undergraduates. Problems which could be inferred included personnel, objectives and expectations, and procedural techniques. A lack of sustained interest in the program at the initiating level seemed a reliable predictor of subsequent problems and it appeared that execution of plans should have remained with those who did the original planning. There is need for more information about special students, for special academic orientation and personal readjustment information for them, an internal and external (publicity) communication system, and for emphasis on the academic integrity of the program.

- 225 EDUCATIONAL RETRAINING REQUIREMENTS OF THE OLDER FEMALE LABOR POOL RETURNEE. Kaufman, Charles Wesley. Arizona Univ., 67-12,209, MF \$4.60, HC \$16.20, Ed.D. thesis, 358p., 67.

A study was made of factors in mature female curriculum planning in Tucson, Arizona, vocational institutions. The study included a community facilities inventory, employer needs and attitudes, needs and interests of women 35 and older, and determination of how well the needs of industry could be fulfilled by community assets and human resources. A questionnaire and interview survey of employer needs showed favorable attitudes toward employing mature females and provided a list of occupations available presently and five years hence. Results of a similar investigation of mature women's needs and attitudes included the following: (1) the majority were interested in returning to work; (2) type of occupation desired varied directly with community social status; (3) monetary need was the prime motive at all levels, but at higher social levels boredom was also an important factor; (4) higher social groups were already well-trained and would need only retraining, while lower groups would need complete vocational training. Data on mature women were analyzed by a five-category socioeconomic scale.

- 226 CHARACTERISTICS, PERCEPTIONS, AND EXPERIENCES OF MARRIED WOMEN STUDENTS AT LANSING COMMUNITY COLLEGE 1965. Hunt, Beverly English. Michigan State Univ., 67-7551, MF \$3.00, HC \$7.20, Ed.D. thesis, 152p., 67.

The main purpose of this study was to describe married women students at Lansing Community College, Michigan, their reasons for going to college, problems faced, and perceptions of attitudes of family and friends toward the dual role of student and homemaker. Data were gathered through questionnaires, interviews with 47 of the 123 respondents, and official records of the Registrar's Office. About 25% of women students were married. Of the married women students, 70% were part-time and 68% were over 25. Marriage and lack of money were the major reasons given for not continuing their education after high school. Almost all had begun their college education at Lansing Community College. Women with children were not postponing education until the children were grown. Married women students surpassed single ones on grade-point averages. Further educational and/or vocational goals predominated. Pressure of time was the main problem cited. Friends and families were generally encouraging; husbands (especially those with some college) and mothers of students were most so. The amount of education in the families of younger women was greater than for older women. Felt needs included more counseling services, day classes in longer blocks of time, and more parking and child-care facilities. Improved counseling and additional research were recommended.

- *227 AN EXPLORATORY STUDY OF NEEDS FOR CONTINUING SELF-DEVELOPMENT AS PERCEIVED BY WIVES OF SCHOOL SUPERINTENDENTS IN THE GREATER BOSTON SUBURBAN AREA. Williams, Marianne Carter. Boston Univ., 66-12,811, MF \$3.00, HC \$7.40, Ed.D. thesis, 159p., 64.

This exploratory study was made to determine whether a sample of school superintendents' wives perceived the need for continuing self-develop-

ment and whether they perceived barriers to their meeting these needs, and to hypothesize some implications for more effective program planning in continuing education for superintendents' wives. An interview guide was used to obtain from a random sample of 30 superintendents' wives from 75 suburbs, their perceptions of the unique functions of wives of school superintendents, their needs for self-development, and the barriers interfering with it. These wives saw their home and family functions primarily in terms of giving support to their husbands. There was less consensus about perceived requirements in regard to school and community functions than about home and family functions. Needs identified for further self-development were: knowledge, attitudes, interests, and self-identity.

- 228 DIFFERENTIAL INTEREST CHARACTERISTICS OF CAREER WOMEN. Schissell, Robert Frances. Nebraska Univ., 67-15,992, MF \$3.00, HC \$7.40, 67.

A study was made of career-orientation differences between 200 career women and 200 noncareer women. Subjects were categorized by locally devised definitions and by scores on a scale of career and homemaking orientations and attitudes, then were administered Form M of the Strong Vocational Interest Blank (SVIB) and a background data sheet, and were scored on the Career Orientation Scale (COS). Seventy-four of the 98 possible correlations of vocational orientations with SVIB occupational and nonoccupational scales were significant. Scores on the COS also correlated significantly with certain of the background questionnaire responses (largely those on home environment and individual personality). The two groups appeared to lie along a bipolar interest continuum of "things" versus "people," with career women toward the pole of "things" and noncareer women toward that of "people."

- 229 IDENTITY DIFFUSION AS A FUNCTION OF SEX-ROLES IN ADULT WOMEN. Jabury, Donald Eugene. Michigan State Univ., 68-7905, MF \$3.00, HC \$6.60, 137p., 67.

This study sought to demonstrate that the relative degree of adult female identity diffusion, as well as certain personality correlates, would be a function of specific sex roles and their combinations. Three groups of 32 women each were selected as married and noncareer, married and career, or unmarried and career women. They were administered a form of the Taylor Manifest Anxiety Scale, the Inventory of Feminine Values, and the Edwards Social Desirability Scale. Contrary to predictions, the three groups did not differ significantly in identity diffusion or anxiety (both supposedly strongest in unmarried career women), and the passive-active range of self-concepts and notions of the ideal woman did not follow the married noncareer to unmarried career range. Moreover, social desirability responses did not necessarily favor the married noncareer role. Activity-Passivity was significantly related to anxiety, with passive women being the more anxious. Age was not related to either dimension. Social desirability responses were the best predictors of the similarity scores obtained in the study.

- 230 THE ACHIEVEMENT MOTIVE IN WOMEN: A STUDY OF THE IMPLICATIONS FOR CAREER DEVELOPMENT. Baruch, Ruth Wasserman. Harvard Univ., 67-3028, MF \$3.55, HC \$12.00, Ed.D. thesis, 276p., 66.

Using 137 Radcliffe alumnae and a national sample of 760 women, this study tested two hypotheses: (1) the achievement motive of women is associated with age and family situation; (2) for those women whose families are established, achievement motivation is associated with paid employment and return to work. The Radcliffe group wrote Thematic Apperception Test-type stories which were scored for achievement motive; the nationwide group were analyzed by education, age, achievement motive, and employment status. The first hypothesis held true for the Radcliffe sample and the college-educated subset of the national sample. The second hypothesis was rejected, for work status and achievement motive were independent for the population in general. Interaction among work status, education, and age was highly significant, indicating that employment patterns by age are different for women of different educational backgrounds. However, for women of each educational level, increases in achievement motive appeared to be followed by return to paid employment some years later. Benefits under Social Security may account for employment changes. The notion of mass media manipulation of women's motives also proved relevant.

- 231 AN ANALYSIS OF SELECTED FACTORS RELEVANT TO THE EMPLOYMENT STATUS IN BUSINESS OFFICES OF MARRIED WOMEN COLLEGE GRADUATES. Beck, Esther Lily. Indiana Univ., 64-5119, MF \$3.50, HC \$12.40, Ed.D. thesis, 271p., 63.

Factors that hindered or impeded the occupational advancement of college women were grouped around four areas: personal and socioeconomic backgrounds, characteristics of the positions held by the women, business policies and practices of employing firms, and points of view expressed by the women about their experiences. They were analyzed. Data were obtained through interviews with 62 women employees and 37 company representatives at 27 firms having 100 or more office workers. A modified case-method approach obtained information since the women's college graduation. It was found that 15 women were ranked as managers, 39 as supervisors, and 8 as routine workers. Factors influential in attaining a managerial level were: supplementary training past the undergraduate degree, continuance with the firm, a high socioeconomic status, a relatively small employing firm, and maturity and poise. It was concluded that post graduate education is the most important factor determining employment status.

- 232 EDUCATION OF WOMEN FOR MODERN INDIAN SOCIETY: A HISTORICAL STUDY WITH A CRITIQUE OF CONTEMPORARY EDUCATIONAL THOUGHT. Rahman, Syeda A. Ohio State Univ., 63-6261, MF \$2.90, HC \$10.15, 222p., 63.

In India under the Muslims from the twelfth century on, education was an Islamic duty in which girls participated. However, higher education for girls was largely for those of upper social levels and on a private basis. Under British rule, organized schooling was finally provided

while missionary and private schools also worked side by side. But education for women became a mere replica of men's education. Dissatisfaction with education led to the National Education Movement and the Women's Movement and some typically Indian schools were started. Since independence, the government has provided free, universal, compulsory education for women. Still women's education lags, chiefly because parents do not yet appreciate the need for educating their daughters. Modern educators are concerned with the problem but the nations' general educational deficiencies and its social and economic backwardness have become their first concerns.

See also: SECTION 7000 HOME, FAMILY, PARENT EDUCATION: Item 5 Amanda Labarca, educator to the women of Chile; 424 re-creation related to ego stage development; 304 work history of married nurses; 252 rehabilitation of women in Milwaukee county jail; 318 role of women student personnel administrators in universities

4700 APTITUDE GROUPS

4710 LOW APTITUDE

- 233 WORK PERFORMANCE OF TRAINABLE ADULTS AS INFLUENCED BY COMPETITION, COOPERATION, AND MONETARY REWARD. Huddle, Donald Douglas. Indiana Univ., 66-12,659, MF \$3.00 HC \$6.40, Ed.D. thesis, 132p., 66.

A study aimed at determining the effects on the work performance of trainable adults working in different types of work groups, and with and without monetary reward, involved 48 subjects (Ss) with the mean IQ of 41.94 and the mean CA of 27.44. There were two groups: the experimental, which received monetary rewards, and the control which had none. Randomly selected subgroups of eight each were given the following tasks: working alone, competing, and cooperating. The Ss in the competitive subgroups were encouraged to compete with each other; the Ss in the cooperative subgroups were encouraged to work as teams. A four-week experimental period followed a two-week training period. The subgroups met for 45 minutes daily, five days a week. A two-by-three factorial design was employed. An analysis of covariance showed that, as a group, the Ss in the reward subgroups performed significantly better than the Ss in the no-reward subgroups, but the analysis did not yield significant differences in the performance rate between the individual, competitive, or cooperative subgroups. However, other factors may have influenced the results; for example, all subgroups appeared to be competition oriented.

See also: SECTION 4750 DISADVANTAGED GROUPS; 5230 ADULT BASIC EDUCATION; 6550 OCCUPATIONAL TRAINING OF UNSKILLED, DISADVANTAGED

4750 DISADVANTAGED GROUPS

- 234 THE COOPERATIVE EXTENSION SERVICE AND THE LOWER SOCIOECONOMIC CITIZENRY. Cram, Leo Lawrence. Wisconsin Univ., 65-6199, MF \$2.80, HC \$9.90, 216p., 65.

A study was made of problems faced by Cooperative Extension in serving and allocating resources for educational needs of low-income groups. Data came from a literature review, mail questionnaires to administrators in all 50 states, and visits to nine southern and midwestern states. Major findings included these: (1) Cooperative Extension has two basic skills (educational and organizational ability) and both have had to be adjusted to fit poor people's needs and circumstances; (2) by streamlining its operation and delegating more responsibility, Cooperative Extension might gain more time to work with the poor; (3) program expansion confronts obstacles relating to instruction, motivation, procedures, policy, and public relations; (4) program emphasis has been on fundamental education to help improve standards of living; (5) Cooperative Extension has worked directly with the poor, selected and trained indigenous nonprofessionals, and provided other organizations with staff training, resource materials, and organizational assistance. Future plans call for continuing present programs, and adding more low-income programs only when an opening exists in the ongoing programs.

- 235 PUBLIC LIBRARY BRANCH SERVICES FOR ADULTS OF LOW EDUCATION. Hiatt, Peter. Rutgers, The State Univ., 63-5886, MF \$3.30, HC \$11.50, 253p., 63.

This study investigates the effectiveness of specially adapted branch library services in encouraging interest in library use among adults of low education. Libraries selected for study were the Carnegie West Branch of the Cleveland (Ohio) Public Library, and the Pennsylvania Avenue Branch of the Enoch Pratt Free Library, Baltimore, Maryland. Case study is used to establish possible links between services and use. A community profile and a study of the program of adult services for each branch is presented. Analyses of interviews with adults of eighth grade education or less in each branch show that several adapted services are related to interest in library use by these adults. Adult services which are shown to have a direct relationship are: location of a high-quality branch library (staff, collection, services) in a low-education neighborhood; easy accessibility to professional librarians; special attempt to build rapport and make low-education adults feel comfortable in library use; easy reading materials for adults; film programs; and other group programs. The patterns of elements of services which are shown to have encouraged library use among the respondents are: use of library in connection with a child, accessibility of a librarian, group programs, and location of the branch.

See also: Item 319 in-service training for persons working with disadvantaged children; 495 library role in retraining people displaced by technology; 419 methods of consumer education in low income urban areas; 180 parent education among disadvantaged; 175 leadership style preferred by low-income rural youth

4800 NEGRO

- *236 ASPIRATIONS OF LOW SOCIOECONOMIC STATUS ADULTS AND IMPLICATIONS FOR ADULT EDUCATION. Dellefield, Calvin Jack. California Univ., 66-216, MF \$3.00, HC \$8.80, Ed.D. thesis, 191p., 65.

This study dealt with aspirations, difficulties in reaching aspirations, and opportunities desired to overcome these difficulties, as expressed by currently or recently unemployed low socioeconomic central Los Angeles Negro adults (236 males and 205 females) whose educational needs could be met by one local adult school. These adults did not hold education for themselves as a major goal or means of attaining goals, but they did consider lack of education a major obstacle. Jobs and adequate incomes were the major goals for both employed and unemployed, although some respondents expressed the goal of providing a good education for their children. Irregular work histories of those currently employed made them little different from those currently unemployed. Lack of a job skill was the difficulty most often noted, followed by lack of money; lack of education ranked a poor third. Findings suggest the desirability of providing better employment preparation activities to help encourage greater adult education participation by low socioeconomic adults.

See also: SECTION 5230 ADULT BASIC EDUCATION; 6550 OCCUPATIONAL TRAINING OF UNSKILLED, DISADVANTAGED; Item 88 discussion program for fertility control with working class Negro mothers

4825 SPANISH SPEAKING

- 237 THE RELATIONSHIP OF SOCIAL CHARACTER AND DOGMATISM AMONG SPANISH AMERICAN YOUNG ADULTS IN THREE SELECTED INSTITUTIONS IN NEW MEXICO. Orr, Rodney Gerry. New Mexico State Univ., 67-11,763, MF \$3.00, HC \$7.80, Ed.D. thesis. 166p., 67.

The purpose of this study was to investigate the social character of Spanish American young adults enrolled in job-training courses. The sample population consisted of 193 eighteen to twenty-four year olds who were at a rural vocational educational institution, a metropolitan technical vocational institution, and an Office of Economic Opportunity neighborhood improvement project (large town and small town) sponsored by a university. The two instruments used in the study were the Rokeach Dogmatism Scale, Form E, and the Kassarian Inner-Other Social Preference Scale. The intelligence quotients of the General Aptitude Test Battery were obtained from the Employment Security Commission on an as-available basis (159 out of 193). The findings showed that there were some pronounced differences in social character but not dogmatism among the Spanish American young adults enrolled in three institutions; there was a slight tendency toward inner-directedness in social character and a definite tendency toward closed-mindedness in dogmatism, social character and intelligence, or dogmatism and intelligence; no significant changes occurred in the social character or dogmatism of a sample after a two-month basic education orientation course at a metropolitan vocational school.

See also: SECTION 5230 ADULT BASIC EDUCATION; 6550 OCCUPATIONAL TRAINING OF UNSKILLED, DISADVANTAGED

4850 AMERICAN INDIANS

- *238 THE MISSION INDIANS: A STUDY OF LEADERSHIP AND CULTURAL CHANGE. Thomas, Richard Maxfield. California Univ., 64-3783, MF \$3.70, HC \$13.05, Ed.D. thesis, 287p., 64.

The history of the mission Indians of Southern California was reviewed together with patterns of leadership and cultural change on six sample reservations. Aboriginal leadership patterns were compared with devastating and brutal changes imposed by Spanish and American invasions from the building of the missions (1769-1834) through the secularization period (1835-48), the American invasion period (1848-1900), and the modern period (since 1900). Field study data were obtained from official files and from interviews with 100 Indians. The reservations were classified as follows: Zone I (relative cultural isolation); Zone II (relative cultural conflict); and Zone III (relative cultural assimilation). In Zone I and Zone III groups, formal leadership positions tended to be filled more often by informal leaders than in Zone II groups. In "conflict" situations, the traditional leaders tended to remove themselves from formal office but retained considerable control and influence within the community. Thus, it was concluded that leadership among the mission Indians is functionally related to the degree of cultural change.

- 239 SELECTED FACTORS ASSOCIATED WITH THE PARTICIPATION OF ADULT OJIBWAY INDIANS IN FORMAL VOLUNTARY ORGANIZATIONS. Hannin, Daniel. Wisconsin Univ., 67-954, MF \$3.00, HC \$9.90, 218p., 67.

This study covered personal and social characteristics, organizational objectives, sponsorship, formal meeting procedures, value concepts, and other factors associated with participation in formal voluntary organizations by a sample of 170 adult Ojibway Indians in three culturally similar communities in northern Ontario. Subject-centered interview questions, and real-life Indian situations phrased in the third person were used. Findings included the following: (1) respondents of both sexes, aged 41 to 50, married, and having five to eight years of schooling, formed the main group of participants; (2) adults from households engaged in seasonal labor, who did not attend adult education courses or attend church regularly, tended not to participate in voluntary organizations; (3) participants considered adult education activities the most important of the organizational objectives, while nonparticipants stressed religious activities; and (4) favorable attitudes toward formal meeting procedures, and attitudes toward change, planning, education, time, and secondary relationships in organizations were significantly related to participation.

See also: Item 68 leadership styles in Neighborhood Youth Corps

5000 MENTAL DISABILITY

- *240 THE EFFECT OF GROUP DISCUSSION AS A LEARNING PROCEDURE ON THE ADAPTIVE SOCIAL BEHAVIOR OF EDUCABLE ADULT MENTAL RETARDATE. Dollins, Curtis Nels. Indiana Univ., 67-16,398, MF \$3.00, HC \$9.25, Ed.D. thesis, 203p., 67.

This study investigated changes in the adaptive social behavior of educable, mentally retarded adults who participated in a group discussion program in a state hospital and training center. A rating scale was developed for judging behavior changes resulting from 20 group discussions. Three experimental and three control groups used 74 subjects, males and females, aged 18 to 45, within the borderline to moderate range of retardation. Two groups were formed according to community placement experience or lack thereof. A third experimental group was heterogeneous, consisting of participants with and without community placement experience. All experimental groups showed gains on behavior-scale scores, especially the group without community placement experience. No significant difference in behavior change was noted between the group with community placement experience and the heterogeneous group. It appears that the selective use of group discussion can do much to maintain and improve the social-adaptive behavior of educable, adult mental retardates; and that group composition (preferably homogeneous) is important to the effectiveness of group discussion as a learning procedure. Recommendations included adaptations of this procedure to the diagnosed needs of participants, minimal use of lecture techniques, and avoidance of abstraction. Longitudinal studies and other research were also advised. (Included are 51 references and 37 tables and figures.)

- *241 A STUDY OF TWO HETEROGENEOUS EDUCATIONAL-LEVEL GROUPS IN A PARTICIPATION-TRAINING PROGRAM OF ADULT EDUCATION: AN EXPERIMENT IN A MENTAL HOSPITAL. Geisert, Mollie McGrath. Indiana Univ., 66-3117, MF \$3.15, HC \$11.05, Ed.D. thesis, 243p., 65.

This study was to determine the extent to which the educational level of female schizophrenic patients could influence their willingness and ability to accept responsibility for self and others through a program based upon freedom of expression, active voluntary participation, knowledge and acceptance of roles and responsibilities, acceptance of self and others as unique persons, and sharing program development. The investigator acted as trainer of two groups of 11 members each in 15 one-hour sessions. These groups had mean educational levels of 12.4 and 7.5 years respectively, but were roughly homogeneous in other respects. Matched untrained control groups completed the design. Patients were rated on a nine-point rating scale, and additional data collected from hospital records, patients' appraisals, and the investigator's observations. Findings of this study tend to support the general conclusion that an adult education program of participation-training is

a potentially effective technique for rehabilitating hospitalized schizophrenic patients, and that educational level does not necessarily influence the fulfillment of the need for increased willingness and ability to communicate acceptance of responsibility for self and others.

- 242 A STUDY OF SELECTED FACTORS AFFECTING THE RESTORATION OF THE FUNCTIONALLY PSYCHOTIC VETERAN TO THE WORLD OF WORK. Lindas, Leonard Irving, Jr. Oregon Univ., 66-12,972, MF \$3.00, HC \$7.60, 165p., 66.

This study investigated differences between functionally psychotic veterans who are successfully employed and those who are not; and the incidence of posthospital employment of male veterans treated for schizophrenic reaction in the Roseburg (Oregon) VA hospital. Data were obtained from patient interviews, administration of the Work Values Scale and a biographical inventory, and questionnaires completed by 68 patients. Productivity, perception of adjustment, and hours of paid work per week were the criteria of successful employment. Findings included the following: (1) those employed were ex-patients who were married, received partial or no external support, had a mental disability which was not service connected, had a definite job or job prospect at discharge, were employed for long periods in one job before hospitalization, and had not lived alone prior to current hospitalization; (2) the working group were more closely involved with other people than the nonworking group.

- *243 A STUDY OF THE PROCESS AND OUTCOMES OF RELATED ARTS THERAPY WITH THE ADULT SCHIZOPHRENIC PATIENT. Keem, Betty June. Michigan State Univ., 66-6136, MF \$3.00, HC \$7.80, 169p., 65.

This study of adult schizophrenic patients in three Michigan psychiatric hospitals sought to determine factors which do or do not interact and produce beneficial results in related arts (primarily music) therapy. Subjects (30 males and 30 females) were divided into experimental and control groups. Personality and psychiatric data-gathering instruments were used. Findings included the following: (1) experimental subjects showed significant personality improvement and a move toward an open ward or outpatient basis, while control subjects were unchanged; (2) related arts therapy seemed to impair the hospital adjustment of experimental subjects; (3) therapists whose patients benefited most from therapy scored higher in original thinking, personal relations, and emotional stability, and lower in cautiousness, vigor, and sociability than other therapists; (4) related arts therapy had little or no effect on the psychiatric illness itself, but it did help to reorganize the patient's personality and seemed to promote the ultimate goal of release from psychiatric treatment.

See also: SECTION 4710 LOW APTITUDE; Item 105 participation training for literacy in mental hospital

5025 PHYSICAL DISABILITY

- 244 EFFECTIVENESS OF PROGRAMMED LEARNING IN BRAILLE INSTRUCTION FOR THE ADULT BLIND. Stockton, George Hanan. Wisconsin Univ., 65-14,933, MF \$3.00, HC \$6.40, 133p., 65.

This study was to introduce a wide variety of techniques and materials with the belief that different approaches would create significant gains in braille reading. All subjects received fifty 50-minute periods of instruction on a twice-daily schedule. In addition to one-half their time being devoted to traditional instruction, the experimental groups were exposed to three levels of training: prereading and initial reading on a series of graphic tactual discriminations graded for difficulty level, a program of braille character discriminations using a self-paced teaching and display apparatus; a program of momentary presentation of braille symbols through the use of an automated learning machine; a program of braille on tape using a tape reader. Control subjects were exposed for an equal amount of time for the learning of braille, but they received the same basic materials through traditional instruction without the aid of programs or automated devices. All groups and levels improved in braille reading ability but the experimental subjects made more obvious gains at or near the .05 level of significance. A significant decrease (.01) in braille reading errors occurred favoring the experimental subjects. It was concluded that the three educational devices and program improved braille reading ability.

- *245 DIFFERENTIAL PATIENT RESPONSE TO INSTRUCTION, COUNSELING, AND DENTAL TREATMENT. Lupton, Daniel E. Chicago Univ., 206p., 67.

Designed to develop experimentally tested patient education programs, this study evaluated differential patient response to three approaches (instruction, counseling, biomechanical) to solving a specific problem in dental medicine. The first approach was to give information and informed opinions on the nature and treatment of TMJ (jaw joint) dysfunction, while the second entailed developing methods of relieving tension and anxiety. Initial measures of educational level, knowledge of TMJ dysfunction, motivation for counseling, and self-concept discrepancy were obtained. (In this study, the "dental therapy alone" patients were the control group.) It was expected that, in view of the emotional and voluntary factors involved in TMJ dysfunction, instruction or counseling would be more effective than a program restricted to physiological or biomedical aspects of the problem. In particular, the instructional approach worked best for the better educated patients. Findings indicated the importance of psychological factors in alleviating the dysfunction; showed that the influence of such factors varies among the patients; and demonstrated the feasibility of designing programs that effectively reach predetermined objectives.

- *246 SOCIOPSYCHOLOGICAL FACTORS IN TUBERCULOSIS CONTROL. Steinicke, David George. Michigan Univ., 65-5944, MF \$2.75, HC \$5.20, 102p., 64.

This study examined sociopsychological factors in the life situations of tuberculosis patients and the relationship of these factors to patient behavior. Critical points studied were: when there is a strong suspicion of having tuberculosis; when it is diagnosed and the patient must enter a sanatorium; when treatment and daily activity become very monotonous; when the patient gets the first inkling he may soon go home; and when he is told of plans for his discharge. During one year, the 60 patients at a sanatorium were rated as either cooperative or uncooperative by staff members who knew them well. Patients were also matched by sex, race, age at admission, stage of disease at admission, marital status, religion, and number of days at the sanatorium. Those experiencing positive, supportive sociopsychological forces at the critical points cooperated in their treatment; those experiencing negative, unsupportive forces at these experience and learning points were uncooperative.

- 247 THE MINNESOTA MULTIPHASIC PERSONALITY INVENTORY AS A PREDICTOR IN VOCATIONAL REHABILITATION. Sandness, David Grimsrud. North Dakota Univ., 67-4467, MF \$3.00, HC \$5.40, 106p., 36.

This study evaluated the Minnesota Multiphasic Personality Inventory (MMPI) as a predictor of employment status with male, physically handicapped vocational rehabilitants of employable age who had been patients at centers at the University of North Dakota and the University of Minnesota; and compared Katzell's Double Cross-Validation (DCV) with a conventional, unilateral procedure (SCV) used on the same sample. Principle results and conclusions were: (1) the MMPI contains items that significantly differentiate the employed and those in training from the unemployed; (2) two final scales were devised and cross-validated by the DCV procedure, but their predictive validity is uncertain; (3) two other scales obtained by conventional item analysis and cross-validation were not significant; (4) the final DCV scales are tentatively valid predictors of employment status for the male rehabilitants, but differences between the final scale and the two contributing subscales may make it inappropriate to cross-validate the former by cross-validating the latter; (5) differences between scales derived by the two cross-validation and by the conventional method indicated that the same items are not necessarily extracted by these differing procedures.

See also: Item 90 discussion in rehabilitation of alcoholics

5050 BEHAVIOR DISORDER

- 248 STATUS AND EFFECTIVENESS OF GENERAL AND VOCATIONAL EDUCATION PROGRAMS IN CORRECTIONAL INSTITUTIONS OF MISSOURI. Glenn, John William. Missouri Univ., 67-947, MF \$3.00, HC \$9.45, 209p., 66.

This study, which was concerned with the status and effectiveness of general and vocational education programs in correctional institutions of Missouri, collected data through interviews with directors of educational programs in the five institutions, interviews with a 10% random sample of the inmate student population, educational and personnel records, and observation. Statistical tests of the significance of the differences between means and percentages (alpha .01) were employed to test five null hypotheses which pertained to post-release adjustment of parolees who had participated in educational programs during their confinement as opposed to those parolees who had not. The inmates studied achieved a mean grade level of 8.4, but Stanford Achievement test scores revealed a mean of only 6.25. Over three-fourths of this inmate population were less than 25 years old. More than 75% of all inmates had sentences of less than five years. Parolees who had participated in education programs during confinement had a significantly smaller recidivism and received significantly fewer number of weeks unemployment compensation. A definite need for both general and vocational upgrading of the inmates confined in Missouri correctional institutions exists.

- *249 ADULT EDUCATION AND PERSONALITY OF INMATES OF THE STATE PRISON OF SOUTHERN MICHIGAN. Hershey, Harvey. Michigan State Univ., 66-8457, MF \$3.00, HC \$7.00, 148p., 66.

This study investigated differences and similarities between those inmates who had participated in the Academic School adult education programs (at the State Prison of Southern Michigan) and another group who had never participated in any adult education activity. Variables were personality factors as defined by the Sixteen Personality Factor Questionnaire and specified nonpersonality areas in an adult education data survey. Randomly chosen inmates were divided in 32 matched groups on the basis of items concerning age, education, recidivism, length of sentence, and participation in special groups or activities, with adult education participation or nonparticipation as the single difference. Participants were found to be significantly more rigid, undependable, and conventional than nonparticipants, who were relatively easygoing, conscientious, and imaginative. Both groups were more rigid and undependable than the general noncollege adult male population norms provided by the authors of the questionnaire. Comparisons between other groups of inmate participators and nonparticipators showed no significant differences on nonpersonality factors. Implications for student recruitment and for program planning were noted.

- *250 AN ANALYSIS AND APPRAISAL OF THE ADJUSTMENT OF SELECTED GRADUATES OF THE MICHIGAN TRAINING UNIT AT IONIA, MICHIGAN. Wiegman, Fred Britten. Michigan State Univ., 66-453, MF \$3.00, HC \$5.60, 113p., 65.

The Michigan Training Unit, a medium security institution established to provide academic, vocational, social, and moral training and guidance to young inmates, was studied to identify vocations of graduates, evaluate and give direction to the present program, and ascertain the attitude of the graduates toward the training program. Questionnaires were submitted to 120 parolee-graduates for the years 1961-63. It was found that the men are young, Caucasian, early school leavers, have worked as common laborers, have no military records, are of average intelligence, single, non-alcoholic or narcotic, and unstable in their work habits. The basic high school education was found to be necessary for graduates to succeed on the job or secure further training. Although the men have made educational, social, and vocational adjustment and are gainfully employed, earnings are at the poverty level. Skepticism exists regarding teaching methods and content of certain academic courses. Sentencing terms and conditions are not conducive to rehabilitation due to brevity of the exposure. It is suggested that group work and human relations training be part of the program; academic and vocational programs be integrated and administered under one person; and followup assistance for graduates and reduced case loads for parole officers be initiated.

- *251 A SURVEY AND ANALYSIS OF THE EDUCATIONAL PROGRAM OF THE ACADEMIC SCHOOL OF THE STATE PRISON OF SOUTHERN MICHIGAN, JACKSON, MICHIGAN, AND ITS IMPLICATIONS FOR THE REHABILITATION OF RELEASED INMATES. Beadle, James Stuart. Michigan State Univ., 66-6100, MF \$3.00, HC \$6.00, 123p., 65.

This study analyzed reactions of 39 released prison inmates who had participated in the educational program of the state Prison of Southern Michigan. Among the findings were: (1) there is little difference between the sample and the total population in terms of employment, wages, job satisfaction, religious participation, and residential movement; (2) there is sensitivity, generally, to the position in which other members of the group, and people in general, find themselves; (3) the educational program was generally accepted as such, with some interest in expansion directed toward vocational ends; (4) 92% stated that the program should be continued and expanded; (5) employment rates upon release were much higher than before imprisonment; (6) most respondents felt they had participated through their own initiative rather than because of an external stimulus (this was not substantiated by prison records). Responses, including expressed concern for those still in prison, indicated favorable attitude changes by respondents and suggested the value of adding vocational rehabilitation programs.

- 252 REHABILITATION OF WOMEN IN THE MILWAUKEE COUNTY JAIL: AN EXPLORATORY EXPERIMENT. RESEARCH STUDY, 1. Kettering, Marvin E. Colorado State Coll., 65-239, MF \$2.75, \$5.00, 98p., 64.

Women at the Milwaukee County Jail were given a four month experimental program of rehabilitation to evaluate its effects on recidivism, county aid status, and employment. The experimental group (102 women) participated in the following courses: Personal care and Grooming; Mother

and Child care; Reading, Writing and Spelling; Business Filing; Vocational Guidance and Group Counseling. Data were accurate and complete for recidivism, but not for subsequent employment or county-aid status. No significant differences were noted on these three criteria between experimental and control subjects. However, four women in the experimental group entered school, seven contacted the placement center of the local vocational school, eleven others sought help from the counseling center in the same school, and five of the 26 alcoholics were sober at the end of the observation period. Moreover, in an additional comparison, average scores on the Rotter Incomplete Sentences Blank indicated significantly improved adjustment for a group of experimental subjects. Findings suggest that criteria other than recidivism, county-aid status, and employment should be used in rehabilitation studies.

See also: Item 80 programmed instruction in Texas Department of Corrections; 257 literacy training in Indiana reformatory; 89 participation training in Indiana reformatory

5200 PROGRAM AREAS

5230 ADULT BASIC EDUCATION

- 253 AN INVESTIGATION OF ADULT NEGRO ILLITERACY: PREDICTION OF READING ACHIEVEMENT AND DESCRIPTION OF EDUCATIONAL CHARACTERISTICS OF A SAMPLE OF CITY CORE ADULT NEGRO ILLITERATES. Berke, Norman Daniel. State University of New York, 67-11,507, MF \$3.00, HC \$7.20, Ed.D. thesis, 153p., 67.

A study was made of variables maximally predicting reading achievement in adult Negro illiterates, and of educational characteristics of 42 such adults in the Buffalo inner city. Subjects were tested with the Wechsler Adult Intelligence Scale (WAIS), the Leiter Adult Intelligence Scale (LAIS), the David-Eells Games (DE), and an Experience Inventory (EI). After 200 hours of instruction, each subject was given a form of the Stanford Achievement Tests in Reading (Primary Level). Findings included the following: (1) reading gains correlated significantly with EI Functional Knowledge, DE Probabilities, EI Utilitarian Books, and DE Analogies; (2) tests for illiterate adults should be visually simple, with uncomplicated directions, several samples for each series of items, and no time limit; (3) all subjects showed ineffective visual and auditory discrimination skills; (4) higher achievers came from smaller families, and from families where there was reading; (5) a greater percentage of achievers' mothers and sisters could read than could those of low achievers; (6) reading comprehension level was not a good indication of reading potential.

- *254 A DESCRIPTION AND ANALYSIS OF SELECTED CHARACTERISTICS IN ADULT BASIC EDUCATION IN HILLSBOROUGH COUNTY, FLORIDA. Dutton, Marion Donnie, Florida State Univ., 183p., 67.

The purpose was to identify the personal, behavioral, and perceptual characteristics associated with participants in a stipend versus a nonstipend adult basic education program in Florida and with an attitudinal variable, alienation, as measured by Dean's scale. Data were obtained from 96 stipend and 155 nonstipend students by means of a questionnaire and the alienation scale. Of the 101 independent variables, 55 were significantly related to type of participation and 19 to degree of alienation. Findings supported the following conclusions: (1) participants in the stipend program differ significantly from those in the other program; (2) adult basic education participants showing a high degree of alienation differ significantly from those showing little alienation; (3) low income, undereducated adult basic education students have problems but do not make extensive use of agencies available for solving these problems; and (4) the students learn about adult classes from many sources. Included are 31 references and 49 tables.

- *255 THE RELATIONSHIP BETWEEN ACHIEVEMENT OF ADULT STUDENTS AND VARIOUS STRUCTURED CLASSROOM SITUATIONS. Varnado, Jewel G. Florida State Univ., 68-11,687, MF \$3.00, HC \$5.20, 105p., 67.

This study investigated the relative effectiveness of selected methods and materials in adult basic education classes. Materials were regular child-centered public school textbooks, recent publications designed for elementary class instruction which had been considered reasonably appropriate for adult classes, and materials written especially for undereducated adults. Participants were Negroes, largely women, covering a wide age span. Teacher-dominated, restricted procedures, and pupil-initiated, class cooperative procedures were compared. One-hour classes were held five nights a week for eight weeks near the students' homes. The study revealed no significant differences between subgroups as to distribution of pretest grade level scores. However, there was a significant gain within classes in which the new instructional materials were used, regardless of the instructional method. The greatest improvement was made in the pupil-centered classroom in which new materials were used.

- 256 AN EVALUATION OF WORDS IN COLOR OR MORPHOLOGICO-ALGEBRAIC APPROACH TO TEACHING READING TO FUNCTIONALLY ILLITERATE ADULTS. Hinds, Lillian R. Western Reserve Univ., 67-4609, MF \$3.00, HC \$10.60, 234p., 66.

Seventy Cleveland, Ohio, inner-city adult illiterates, 33 from an experimental group and 37 from a contrast group, were studied to determine the efficiency and effectiveness of Words in Color or the Morphologico-Algebraic approach to teaching reading. Results indicated that the reading achievement gain of functionally illiterate adults taught by the Words in Color or the Morphologico-Algebraic method is superior to that achieved by a traditional method. The gain of the experimental group, as evaluated by the California Reading Test could not, moreover, be explained by the following variables which might have affected learning: intelligence, visual perception, auditory discrimination, or

teacher superiority. Interviews and projective tests were given to the highest and lowest gainers from each treatment group, and the effects of socioeconomic background characteristics were assessed. Verbal and projective tests successfully differentiated between high and low gainers, but projective drawings disclosed that the contrast group students were better adjusted socially than the others. Members of the experimental group improved significantly in auditory discrimination and visual perception. Students appeared to read orally on the Durrell Analysis of Reading Difficulty test at a higher grade level than they scored on the California Reading Test.

- *257 READING INSTRUCTION BY A PHONIC METHOD FOR FUNCTIONALLY ILLITERATE ADULTS AT THE INDIANA REFORMATORY. Henney, Robert Lee. Indiana Univ., 64-12,036, MF \$2.75, HC \$9.00, 197p., 64.

The purpose of this study was to determine the extent to which functionally illiterate adults can increase their reading performance if given special reading instruction by a phonic method, and if there is a significant difference between gain made by persons taught individually and those taught in groups. The persons in one experimental group received instruction by a phonic method one hour each day for 20 sessions in a group situation. The persons in the other experimental group received the same type of instruction for the same period of time but were taught individually. Persons in the control group attended regular classes of the T.R. White elementary school at the Indiana Reformatory. Pretests and post tests to determine reading level and areas of reading difficulty were administered through the Standardized Oral Reading Paragraphs by William S. Gray and the Gates-McKillop Diagnostic Reading Tests. The test of significance was accepted at the five-percent level and indicated that the Family Phonics System was an effective tool for teaching functionally illiterate adults, either as individuals or in groups.

- 258 A STUDY OF SYSTEMS FOR TEACHING ADULTS READING SKILLS. Stanton, Paul E. University of South Carolina, 67-4109, MF \$3.00, HC \$5.20. 105p., 66.

This study investigates the effects of various reading systems on different age levels of adults whose tested reading ability was below the eighth-grade level. Analysis of data was accomplished through an analysis of variance of a three-factor experimental design, which permitted an analysis both of main effects of the experimental variables and of the interactions created by the variables being studied. Findings of the study revealed that: (1) none of the experimental systems was significantly more effective than the Control system as measured by the Gates Reading Survey; (2) the Linguistic experimental system is significantly more effective in the teaching of reading rate than the Auditory Visual experimental system; (3) the age level below the mean age of the group improved their reading rate significantly more than the age level above the mean age; (4) none of the systems used was significantly more effective in the teaching of the total reading process; and, (5) the Linguistic system was significantly more effective

than the Auditory Visual system in the improvement of reading rate. Standardized systems hold the teacher variable more constant, since they assist in constancy maintenance of the teacher variable, but do not hinder the individual teacher's efficiency. Therefore, a standardized system seems more stable than the teacher-made systems.

- 259 A STUDY OF DIFFERENT STYLES OF EDUCATIONAL MATERIALS FOR ADULT NEW LITERATES. Cortright, Richard Watkins. The American Univ., 67-12,036, MF \$3.00, HC \$8.80, Ed.D. thesis, 194p., 67.

Three complete and separate experiments were designed to test the relative effectiveness of three teaching styles--the expository, the conversational, and the interrogative. The population comprised adults currently enrolled in adult basic education classes in two large Eastern cities. In each experiment three different expository passages, one each from three current publications for adult new literates, were chosen and rewritten by the researcher in linguistically comparable conversational and interrogative styles. Equality in difficulty was also obtained. Each participant answered a short multiple-choice test which was based on the passage he had read and which, along with the other tests, conformed to the criteria for linguistic comparability. Statistical analysis suggested that none of the three different styles being investigated was significant in differentiating the comprehension of adult basic education student in the areas studied, and the experiment did not support a generalization among teachers of adult basic education students that the conversational style was most effective for their students.

- 260 A STUDY OF COMMUNICATIONS TO ADULTS OF LIMITED READING ABILITY BY SPECIALLY WRITTEN MATERIALS. Laubach, Robert S. Syracuse Univ., 64-2298, MF \$2.75, HC \$8.60, 189p., 63.

Two hypotheses were studied--that adults considered functionally illiterate may receive communication by specially written materials, and that these materials may be prepared in various ways which will differentiate in communication conveyed. Four newspaper articles were rewritten in three different ways. These and the original form were administered as silent reading exercises in adult elementary classes in Philadelphia and Cleveland. One sample (164 white, foreign born participants), spoke English as a second language, while in the other group, 104 adults, primarily Negro, spoke English as their native tongue. Analysis of variance supported the first hypothesis, that communication may be increased by specially written materials, but not the second, that different ways of writing would differentiate. This was interpreted to mean that while adult educators express the need for more simplified reading materials for adults, care should be taken to assure the appropriate use of such materials. It may be recommended that these materials be used as supplementary reading in supervised learning situations.

- 261 TEACHING ENGLISH AS A SECOND LANGUAGE TO SPANISH-SPEAKING ADULTS. Walker, Elna LaVerne. Texas Univ., 64-6637, MF \$2.75, HC \$8.40, 184p., 63.

The purposes of this study are to gather and describe certain basic principles and facts about the English language, and select those which are useful in teaching American English pronunciation to Spanish-speaking adults; and to construct a manual of pronunciation drills based upon the application of these selected linguistic data which are appropriate for teachers unsophisticated in linguistics and for Spanish-speaking adults with low-level scholastic achievement. Basic to the study are the assumptions that any language being learned as a second language can best be taught aided by linguistic comparison of the second language and the learner's mother language. The study involved a critical investigation and analysis of the sound system of English; a comparative and contrastive analysis of Spanish and English; and the development of a pronunciation manual for students and teachers who are not linguistically trained. The method of transcription used in the manual departs from the IPA system and uses instead a system of respelling English through the sounds of Spanish.

- 262 THE IMMIGRANT AND THE SCHOOL IN NEW YORK CITY: A PROGRAM FOR CITIZENSHIP. Farrell, John Joseph. Stanford Univ., 68-6514, MF \$3.00, HC \$9.00, Ed.D. thesis, 196p., 67.

A study was made of the nature of immigrant education in New York City during the years 1895-1915 and its impact on American education. Citizenship education grew from a narrowly-conceived course in 1900 to a total concept of public education by 1915, and changed further during and after World War I to meet the desire for national unity and the need for self-understanding. Teachers were often ineffective with immigrants because of cultural bias and inadequate training and understanding. Parochial schools were important in transmitting national cultures; the Federal government, immigrant associations, churches, voluntary agencies, and individuals greatly aided in Americanization. Immigrant education caused major changes in public education, including health programs, social studies programs, and new democratic teaching methods. (The study concludes with an investigation of the Puerto Rican educational problem in New York City today.)

See also: SECTION 5280 LITERACY EDUCATION - FOREIGN; 6550 OCCUPATIONAL TRAINING OF UNSKILLED, DISADVANTAGED: Item 105 participation training for literacy in mental hospital; 461 survey of public school adult elementary education

5280 LITERACY EDUCATION - FOREIGN

- 263 AN ANALYSIS OF UNESCO'S CONCEPT AND PROGRAM OF FUNDAMENTAL EDUCATION. Wodajo, Mulugeta. Columbia Univ., 64-1510, MF \$2.80, HC \$9.70, Ed.D. thesis, 213p., 63.

Through an analysis of Unesco documents, the meaning, scope and content of Fundamental Education--a program to improve the living conditions of the economically underdeveloped countries through education and self-help--and some of Unesco's major projects were examined. The program passed through four distinct periods--(1) 1945-1950, laying the theoretical groundwork of Fundamental Education, (2) 1951-1955, carrying out projects and inaugurating two regional Fundamental Education Centers, (3) 1956-1960, reexamining the program in the light of the United Nations' program in community development, and (4) 1961-, attempting to disassociate itself from its Centers and generally withdrawing from the field in favor of the United Nations' community development and vocational education projects. Most of the organization's Fundamental Education projects were too ambitious to be manageable. Both the rise and decline of Fundamental Education were a reflection of the ideological forces of the period. The study shows the obstacles, financial and administrative, which Unesco faced in carrying out its programs and reveals Unesco's immense contribution to Fundamental Education and through it, to international education, especially in enriching the literature in the field.

- 264 TRENDS IN WORLD ILLITERACY SINCE 1900 AND ITS RELATION TO CERTAIN EDUCATIONAL, SOCIAL AND ECONOMIC FACTORS. Sothi, Pan. Ohio Univ., MF \$3.00, HC \$9.45, 210p., 66.

A study of the literature on world illiteracy since 1900 and the relationship between illiteracy and certain educational, social and economic factors suggests the following conclusions. (1) It appears that the prolongation of schooling beyond elementary level can insure an actual reduction of illiteracy. (2) Illiterate families tend to have a large number of children. (3) Illiteracy, especially on the part of the mother, is at least as important as a health factor affecting the continuance of infant life. (4) The decline of illiteracy and the decline of agriculturalism are closely related. (5) Human resources are one of the principal components in economic development. The study recommends that: (1) case studies in countries with high or low illiteracy rate should be made to determine factors that influence and retard illiteracy; and (2) the extent to which illiteracy can retard economic growth should be determined. The study is based on information found in Unesco and United Nations publications.

- 265 THE EFFECT OF LITERACY TRAINING ON MODERNIZATION VARIABLES. Herzog, William Adam, Jr. Michigan State Univ., 68-7900, MF \$3.00, HC \$5.20, 101p., 67.

The present research was a field experiment exploring the relationship of literacy to certain modernization variables. Data were collected in five rural communities in Minas Gerais, Brazil, in July 1966. The communities were matched as closely as possible on population, literacy rate, distance to an urban center, community institutional development and external contact. Four communities were randomly chosen for liter-

acy education programs; the fifth was the control group. Analysis of variance between illiterate enrollees and illiterate nonenrollees in the four treatment communities was based on the variables of empathy, achievement motivation, cosmopolitanism, mass media exposure, and political knowledge. No significant differences were found for either males or females. Hypotheses predicting an association between literacy program enrollment and training and increases in the five variables were not supported. Lower levels of modernization found among illiterate adults apparently will not discriminate between literacy program enrollment and nonenrollment; but, despite the insignificant differences reported here, there were indications that a full-length program would produce a significant effect. (Six tables and 58 references are included.)

See also: SECTION 5550 COMMUNITY DEVELOPMENT PROGRAMS - FOREIGN; Item 503 literacy and political education in China; 430 memory span of foreign students of English

5300 ADULT SECONDARY EDUCATION

- *266 THE HIGH SCHOOL DIPLOMA PROGRAM IN PUBLIC ADULT HIGH SCHOOLS. Hathaway, William Rainey. California Univ., 64-12,892, MF \$2.75, HC \$7.00, Ed.D. thesis, 146p., 64.

This study sought (1) to assess the development of adult high school graduation programs in cities with over 12,000 day students, graduation requirements in relation to regular high school requirements, and views of adult educators as to desirable adult diploma program; and (2) to make suggestions for such programs. Adult high schools apparently had no distinctive adult programs. They were typically four-year institutions; 13.3% were administered through day high schools; only 50% issued their own diplomas. According to 54.3% of the adult administration, adult high school programs have received recognition equal to that of day school. Acceleration by standardized testing and the granting of work experience credit were not done in many adult schools because of disapproval by a local or state education agency or an accrediting association. About 66% of the adult educators felt that the programs should reflect adult achievement and maturity through special courses, acceleration, and, in some cases, work experience credit; that initial assessment of adult needs is basic; and that curriculum should equip adults for rapid change and self-sufficiency.

- 267 THE GENERAL EDUCATIONAL DEVELOPMENT (GED) HIGH SCHOOL EQUIVALENCY CERTIFICATE PROGRAM IN COLORADO: RESEARCH STUDY NO. 1. Pipho, Christian Carlyle. Colorado State Coll., 65-14,829, MF \$3.00, HC \$7.20, Ed.D. thesis, 153p., 65.

The purpose of this study was to conduct a formal evaluation of the General Education Development (GED) High School Equivalency Certificate Program in Colorado. The investigator made: (1) an historical survey of the growth and changes in the Colorado program since 1946;

(2) a statistical comparison of 483 people taking the GED test battery; (3) a followup survey of 369 people who received a high school equivalency certificate; and (4) a survey of the amount of success experienced by 169 equivalency certificate holders in vocational and industrial jobs and 279 equivalency certificate holders in college. Conclusions reached were: (1) Colorado residents use the high school equivalency certificate primarily for job purposes and perform as well as high school graduates in these jobs; (2) success of the Colorado GED equivalency certificate holders in college is limited (approximately 20% of the equivalency certificate holders who enrolled in Colorado colleges were able to graduate); (3) no practical significant correlations were found between age and last grade completed to passing or failing the GED test battery; and (4) there was strong evidence of over-lap among the five subtests. (An annotated bibliography is included).

- 268 A STUDY OF THE INFLUENCE OF PRIOR SCHOOL EXPERIENCES, ACHIEVEMENT MOTIVES, AND ACADEMIC SCHOOL ACHIEVEMENT OF ADULT HIGH SCHOOL STUDENTS WITH IMPLICATIONS FOR PERSISTENCE IN SCHOOL. Miller, Rulon Glen. Utah Univ., 65-1798, MF \$2.75, HC \$5.40, Ed.D. thesis, 108p., 64.

This study sought to determine differences in previous school experience, achievement motives, and academic school achievement between individuals who persisted in an adult high school program until graduation and those who dropped out. Subjects (43 men and 52 women) ranged in age from 17 to 61 and included students who would be classified, in terms of high school credits earned, in grades 10, 11 and 12. Data on major variables came from adult high school records, the Thematic Apperception Test (TAT), and the California Achievement Test and California Test of Mental Maturity. It was found that the previous secondary school experiences and academic record, parental education, and numbers of Achievement Imagery statements or goals appearing on the TAT were all predictors of persistence in adult high school. However, differences between persisters and dropouts on academic school achievement, and correlations between TAT achievement motives and actual school achievement, were not statistically significant.

- 269 A MULTIVARIATE ANALYSIS OF THE RELATIONSHIP OF ACADEMIC MOTIVATION, APTITUDE, SOCIOECONOMIC STATUS, AND AGE TO PERSISTENCE IN ADULT EVENING SCHOOL. Busby, Walter Alvin. Michigan State Univ., 66-365, MF \$3.00, HC \$4.80, Ed.D. thesis, 94p., 65.

A study was made of various factors related to the persistence of adult students who enrolled in the Lansing, Michigan, Adult Evening Program during the period 1956-63. The population was stratified into four groups by sex and persistence, and a random sample of ten students was taken from each group. Objective measures of academic motivation (Michigan State M-Scale), verbal aptitude (Differential Aptitude Test: Verbal Reasoning), socioeconomic status (Socioeconomic Scale), and age were applied to male and female students who had enrolled in and completed work for a high school diploma, and those who had dropped out. There were among the findings: (1) academic motivation was related to

persistence among the males but not the females; (2) aptitude and age were not significantly related to persistence for either sex; (3) socioeconomic status was significantly related to persistence for both sexes. No significant differences emerged between persisting males and females and nonpersisting males and females.

- 270 A MATCHED PAIR STUDY OF RETURNEES AND NON-RETURNEES TO THE CAPE FEAR TECHNICAL INSTITUTE. Doss, Calvin Lee. North Carolina Univ., 67-5335, MF \$3.00, HC \$7.80, 167p., 66.

An interview study was conducted of factors related to dropouts' decision to enter the Cape Fear Technical Institute to meet requirements for the high school equivalency examination. Two groups of male dropouts from the New Hanover (North Carolina) County Schools were compared--one group enrolled at the Institute and a matched group, not enrolled. Questions on attitudes, curricular problems, family relationships, school staff relations, and motivation to return to school were asked. Data were also gathered from school records. The significance of differences in response was tested by the chi-square technique. It was concluded that prior to withdrawing from school, there were statistically significant differences between the two groups. There were more returnees than matched dropouts who had home responsibilities, had places to spend leisure time, were interested in their school work, and received encouragement from a teacher and from employers to return to school. More matched dropouts had a car while in school, had received corporal punishment in school, and had relatives who had dropped out.

See also: SECTION 7800 PUBLIC SCHOOL ADULT EDUCATION; Item 249 personality of prison inmates in academic programs; 251 academic programs for prison inmates; 250 usefulness of high school education for prisoners; 108 class versus workshop method in adult high school

5400 HIGHER EDUCATION - ACADEMIC PROGRAMS

- *271 A COMPARATIVE STUDY OF HIGH SCHOOL RECORDS AND COLLEGE ACHIEVEMENT OF A SELECTED GROUP OF ADULT UNDERGRADUATES. Metz, Betty Ann. New York Univ., 66-9467, MF \$3.00, HC \$6.00, 124p., 66.

The study aimed at determining the extent to which the high school records of a selected group of adult undergraduates might be used as predictors of their college achievement. This group comprised 118 adults who completed the freshman course requirements in the evening degree program at Newark State College between 1957 and 1964. A comparison was made between the college academic achievement of adult students who had college preparatory backgrounds in high school with the college achievement of adult students who did not have such high school backgrounds. A two-by-two contingency table was prepared, and the chi-square test was applied to these data. Findings showed that college preparation in high school and college achievement were independent, and that there was a correlation of .458 at the .05 level, between the

high school and college academic achievement of the adults with high school averages of 2.32 and above. The correlation between the high school academic achievement and the college academic achievement of the adults with high school averages of 2.31 and below was not significant.

- 272 A STUDY OF THE EVALUATION OF EXTENSION COURSES OFFERED FOR CREDIT AT SIX STATE SUPPORTED INSTITUTIONS OF HIGHER EDUCATION IN NORTH CAROLINA. Wilde, Simpson Ownbey. North Carolina Univ., 65-14,403, MF \$3.40, HC \$11.95, Ed.D. thesis. 262p., 65.

This investigation dealt with extension operations, student and faculty characteristics, and evaluations by students, faculty, and college officials of extension credit courses at six state-supported colleges and universities in North Carolina. Interviews with 19 college officials, and questionnaire responses by 343 students and 258 faculty, were used. Findings included the following: (1) on-campus extension courses were evaluated as significantly superior to those off campus in terms of the supply of instructional and reference materials, student access to a library, and student participation and interest in course work; (2) guidance services were inadequate; (3) the extension credit students were largely associated with the armed forces or the public schools; (4) older faculty members with higher rank were relatively unlikely to teach off campus; (5) off-campus faculty thought that assignments to off-campus courses should be made only for extra pay and with the consent of the faculty members concerned, that extension administration should be handled by extension departments, and that academic affairs should be handled by the department offering the course; (6) on-campus faculty saw little difference between teaching extension courses and conventionally scheduled courses.

- 273 ADMINISTRATIVE PROCEDURES IN GRADUATE EDUCATION THROUGH UNIVERSITY EXTENSION. Shields, Reed Livingston. Brigham Young Univ., 65-12,979, MF \$3.00, HC \$5.40, Ed.D. thesis, 108p., 65.

Using interviews and a questionnaire, this study investigated administrative procedures used in graduate extension education by 60 members of the National University Extension Association (NUEA). Attention was given to program structure; residence requirements for off-campus graduate programs; counseling and guidance services; the reimbursement of the graduate faculty; procedures for course scheduling, faculty recruitment and orientation, and assignment of teaching loads; provision of textbook, library, and audiovisual services; and procedures used to gain approval for graduate courses at off-campus centers. The salient feature of graduate extension education seems to be the diverse character and behavior of NUEA institutions. Procedures and provisions appear to be determined to a large extent by the continuing education needs of the "professional public." Findings suggest that it might be well to sustain the diversity of these institutions so that each can best serve the large concentration of professional people who wish to keep up with the current "knowledge explosion."

- 274 EFFECTS OF THE 1965 REVISION OF UNDERGRADUATE STANDARDS OF THE AMERICAN ASSOCIATION OF COLLEGIATE SCHOOLS OF BUSINESS ON EVENING COLLEGES. Barton, William David, Jr. Tennessee Univ., 68-3727, MF \$3.00, HC \$10.15, Ed.D. thesis, 225p., 67.

The purposes of this study were to determine the impact of the 1965 revised standards for the accreditation of undergraduate programs of the American Association of Collegiate Schools of Business (AACSB) upon evening college programs, and delineate implications for evening colleges. A brief questionnaire was used to examine the general effects of the standards upon evening colleges. The deans of five of the 26 institutions selected for in-depth study were interviewed. Major findings showed that AACSB revised standards had little or no effect on evening programs of nine institutions; only two of the 26 institutions filed a flight plan with the executive committee of AACSB; 14 of the 16 made considerable use of regular full-time faculty in their evening programs prior to the revision of standards; four of the business deans at the case-study schools reported an institutional commitment to the accreditation of each of their professional programs; and four of the business deans felt that AACSB affiliation was vital to the development of their program. One of the implications was that evening colleges must find ways to meet standards without restriction of business programs for adults.

- *275 A STUDY OF THE EFFECT OF A COLLEGE READING PROGRAM UPON GRADE-POINT AVERAGE IN ODESSA COLLEGE, ODESSA, TEXAS, Freer, Imogene Johns. Michigan State Univ., 66-6124, MF \$3.00, HC \$6.00, 125p., 65.

A study was made of the effectiveness of the developmental reading program in Odessa Junior College, Odessa, Texas by making a comparison of the grade-point averages for one academic year (1963-64) of 40 matched pairs of freshmen students. The 40 pairs were matched on five variables--initial reading score, scores on the School and College Ability Test, class load, age, and sex. The experimental group had reading instruction and the control group had none. Chi square and the matched pairs "t" test were the statistical tools employed. Major conclusions were: (1) the mean difference in grade-point average was significantly higher for the group which had reading instruction; (2) there was no statistical significance in the number of males versus females who took the reading course in proportion to the population; (3) students who have reading instruction make higher percentile gain scores on comprehension, vocabulary, rate, and total score as measured by the Nelson-Denny Reading Test. (An extensive bibliography is included.)

- *276 FACTORS RELATED TO THE ACADEMIC SUCCESS OF MALE COLLEGE STUDENTS FROM FIVE SELECTED WISCONSIN COUNTIES. Schroeder, Wayne Lee. Wisconsin Univ., 63-3966, MF \$4.10, HC \$14.40, 319p., 63.

Relationships were sought between selected background factors and college academic success of 186 male high school graduates of 1957 from five Wisconsin counties who attended college a minimum of one year. Background data came from high school academic records and by five questionnaires administered over a five year period. College academic data (first year overall grade point averages plus course averages) came from official transcripts. Findings included the following: (1) all high school academic factors, including grade point averages in language, pure science, mathematics, social science, and in all courses, correlated positively with corresponding college averages; (2) the 24 nonacademic factors as a group added relatively little to prediction; (3) those whose high school course interests were influenced by the challenging, stimulating, or problematical nature of courses earned significantly higher college averages; (4) those who had been interested in pure science and mathematics, surpassed other groups in college except the group indicating interest in high school language.

- 277 A MODIFIED CLOZE PROCEDURE FOR ASSESSING ADULT READING COMPREHENSION. Greene, Frank Pierpont. Michigan Univ., 65-5308, MF \$2.75, HC \$6.20, 130p., 64.

This study investigated the effects of a modified cloze procedure in improving measurement of adult reading comprehension, and attempted to demonstrate two components of comprehension (reading speed and vocabulary) as measured by this technique. The standard cloze procedure involved deleting every 12th word with no class restrictions. The modified procedure restricted eligible words to nouns, verbs, adverbs, and adjectives (content words) with each potential deletion evaluated for possible effectiveness. For each word deleted under the modified procedure, there was felt to be enough redundancy remaining in the passage so that superior readers could identify missing words. Experimental subjects were 128 college students. It was concluded that modified cloze procedures do not improve the effectiveness of standard cloze procedures in measuring reading comprehension, and that the two vocabulary tests (power and context) do not, in themselves, account for the variance of the cloze measure of reading comprehension.

See also: SECTION 5500 COMMUNITY SERVICES AND PROGRAMS; 5700 PROFESSIONAL, TECHNICAL CONTINUING EDUCATION; 7510 COLLEGES AND UNIVERSITIES: Item 315 opinions of students, faculty, administrators of off-campus credit courses; 81 programmed instruction in adult statistics course; 480 retired military officers in higher education

5500 COMMUNITY SERVICES AND PROGRAMS

- *278 THE ROLE OF THE UNIVERSITY IN STATE CHANGE: PERCEPTIONS OF THE PUBLIC SERVICE FUNCTION IN THE PACIFIC WEST COAST REGION. Martin, Doris Ellen. Columbia Univ., 64-8611, MF \$2.75, HC \$8.00, Ed.D. thesis, 173p., 64.

This project examines aspects of the public service responsibility of four state universities--California, Hawaii, Oregon, and Washington; it identifies the role and responsibility of the university in state change as perceived by general extension administrators, deans and administrators, and status leaders outside the university. Interview data were analyzed in terms of perception of role and responsibility of the university, restrictions in the implementation of this perceived role, responsibility of others in state change, and university-state communication of needs. Major findings indicate: an accurate recognition of current state problems; a university role and responsibility in state change which was established as part of the institution's public service function; three university functions ranked as teaching, research, and public service; an administratively wide diffusion of action programs which implement university role perception; considerable variation of opinion concerning the general extension role in state change; some restricting factors operating against implementation of university role; some countervailing factors operating for implementation of university role; and future development of public service function of the universities.

- *279 CONGRESS' DEFINITION OF EDUCATIONAL ADMINISTRATIVE ROLES FOR AGENCIES PARTICIPATING IN THE GENERAL EXTENSION PROGRAM AUTHORIZED IN THE HIGHER EDUCATION ACT OF 1965. Long, James Stephen. Wisconsin Univ., 66-13,427, MF \$3.00, HC \$10.15, 225p., 66.

This study dealt with the educational administrative roles expected by Congress of agencies participating in conducting the university general extension program authorized under Title I (Higher Education Act of 1965). Agencies were identified to which Congress had assigned elements of seven tasks: establishing guidelines, selecting clientele, selecting participant institutions, choosing educational methods, assembling financial resources, coordinating, and evaluating. The way in which Congress fulfilled tasks it had assumed, and the guidelines for performance of tasks assigned to other agencies, were described. Findings led to several conclusions: (1) Congress provided for performance of each task by assigning it to at least one agency, setting guidelines for tasks assigned to other agencies, and authorizing use of Federal funds for each assigned task; (2) it expected distinct roles for participating agencies and clearly distinguished the tasks, or specific levels of performance in shared tasks, for each agency; (3) it fulfilled its own tasks in a specific and pragmatic manner; (4) it set permissive guidelines for the performance of tasks assigned to other agencies.

- 280 IMPLEMENTATION OF TITLE I OF THE HIGHER EDUCATION ACT OF 1965 IN TENNESSEE. Welch, Franklin Weldon. Florida State Univ., 68-7804, MF \$3.00, HC \$10.35, 226p., 67.

The purpose of this study was to analyze the operation of Title I of the Higher Education Act of 1965 in Tennessee. Sources of data were: Title I files in the State Agency at the University of Tennessee,

college catalogs, correspondence, printed materials, questionnaires completed by institutional directors of Title I, and interviews with state agency officials and Title I institutional directors. The research method employed was the case study. The program in Tennessee followed the stated philosophy and the "Regulations." Problems restricting implementation of Title I were: the naming of the University of Tennessee as the state agency, the limited function of the advisory council system, state agency emphasis upon research, manpower shortages at institutions and the agency, problems in communication, and inexperience. Significant relationships were found between amount of funds received and planning with persons outside higher education, population density, and number of participants. Title I participants were community leaders and professionals living in urban communities. Thirty-two proposals were funded under the 1966-67 funding. Personnel used in Title I were from the field of higher education and held the doctorate or a high position in community leadership.

- 281 SELECTED URBAN PROBLEMS AND THE PUBLIC COMMUNITY COLLEGE. Hankin, Joseph Nathan. Columbia Univ., 68-8980, MF \$3.50, HC \$12.40, Ed.D. thesis, 271p., 67.

This study posed some urban problems (categorized as housing, employment, and education) affecting junior colleges, and suggested how these colleges might act on the problems and whether, in fact, they were doing so. Questionnaires, interviews, and visits with faculty, administrators, and students at 21 colleges were used, and correspondence was held with universities, public officials, and others on problems of the 28 largest United States metropolitan areas. The study assumed that urban community colleges have an obligation to become agents or catalysts of social change. The newness of some urban community colleges, a deluge of student applications, lack of community response to offers of help, and lack of facilities and/or money were among the reasons the colleges gave for lack of involvement. The author felt that poor overall planning and conservative attitudes of administrators, faculty, students, and parents were also an inhibiting factor. Recommendations pertained to employing personnel for long-range planning, institutional research, and other purposes, and to such matters as community-oriented program planning and placement, developmental education, parent education, and use of college facilities by deprived groups.

- 282 COMMUNITY SERVICES OF THE COMMUNITY COLLEGES IN THE STATE OF PENNSYLVANIA. Morton, Paul Wesley. Lehigh Univ., 66-11,828, MF \$3.00, HC \$7.00, Ed.D. thesis, 147p., 66.

A study was made to identify the major elements of a community service program, to define the scope of a community, and to make recommendations on initiating and operating services in Pennsylvania community colleges. Questionnaire interviews were held with personnel of public two-year colleges in Florida, Michigan, and New York and in Pennsylvania community colleges in Harrisburg, Philadelphia, and Bucks County. Community

services were noncredit activities aimed at human resource development and desirable socioeconomic conditions and included seminars, workshops, adult education, and other activities of a cultural, economic, and educational nature. The community served by the community college was defined as a relatively limited geographic area. The Pennsylvania community colleges in the study were not performing the community service function to any significant extent but were primarily concerned with college-transfer curriculums and accreditation by the Middle States' Association.

- *283 A STUDY OF COMMUNITY SERVICES IN THE COMMUNITY COLLEGES OF STATE UNIVERSITY OF NEW YORK. Festine, Armond Joseph. Syracuse Univ., 68-5507, MF \$3.00, HC \$7.00, Ed.D. thesis, 149p., 67.

This study assessed the extent to which the stated commitment of State University of New York to provide community service programs in adult education has been met and the relationship between the number of programs and such factors as community size, the age of the college, the number of colleges offering programs within the community, and means of financing programs. Data were obtained from college catalogs and promotional literature, interviews with college administrators, and questionnaires mailed to each college. It was found that 15 colleges had made a complete commitment to provide programs and 13 had made a limited one. The colleges reported a total of 581 such programs for the 1964-65 academic year. The greatest contributions lay in financial support of adult cultural education, and the least were in the area of community development. Discrepancies emerged between stated commitments and actual practice, and it was concluded that the community colleges have not fully accepted community service as a major educational objective. (Included are 40 tables and 44 references.)

- *284 COMMUNITY SCHOOL LEADERS FUNCTIONING AS PERSONAL INFLUENCE LEADERS. Holman, Paul Cameron. Michigan State Univ., 66-389, MF \$4.00, HC \$13.95, 309p., 65.

Research was conducted to determine if lay citizens occupying various leadership positions in community school programs and activities were personal influence leaders in the subcommunity served. A city (Flint, Michigan) with a well established adult-oriented community school program was chosen for the study. Sociometric, key informant, and self-designating techniques were used. School leaders with and without personal influence, and nonleaders, were analyzed by numerous personal and socioeconomic characteristics. Findings included the following: (1) individuals within each leadership and influence category showed similar characteristics, differences being most often a reflection of socioeconomic factors; (2) personal influence leaders were significant neighborhood leaders; (3) significant personal influence leaders tended to be professional persons, especially in lower socioeconomic areas; (4) they were most prominent in interaction within neighborhoods, frequency of interaction, and effective influence.

- *285 THE CONTRIBUTIONS OF THE CHARLES STEWART MOTT FOUNDATION IN THE DEVELOPMENT OF THE COMMUNITY SCHOOL PROGRAM IN FLINT, MICHIGAN. Clancy, Peter Liguori. Michigan State Univ., 64-924, MF \$3.20, HC \$11.05, 245p., 63.

The Charles Stewart Mott Foundation is the only large foundation in the United States that channels the bulk of its spending through the public school system of one community, having given more than \$20 million to the Flint, Michigan school system since 1935. A grant to the Flint Board of Education of \$1,800,000 for the school year 1962-63 covered school-administered, school-centered programs in health care and education, adult education and recreation, dental care and education, curriculum enrichment, youth delinquency prevention, and high school drop-out rehabilitation. In an average week, more than 70,000 persons take part in these self-help, school-centered programs, and over 8,000 visitors studied the program in 1962. By providing seed money, supporting programs of high demonstration value in a limited geographic area and range of interests, bridging gaps between needs and resources, and contributing at the community level, the Mott Foundation adheres admirably to the best ideals of philanthropic spending. Universal values inherent in such a scheme could be of significance for any foundation seeking a channel for nonpalliative giving.

- *286 CIVIL DEFENSE ADULT EDUCATION: A CASE STUDY OF AN EXPERIMENTAL PILOT PROGRAM IN FLORIDA. Culbertson, Millicent Kicklighter. Florida State Univ., 68-345, MF \$3.00, HC \$9.00, Ed.D. thesis, 198p., 67.

A study of the development and effectiveness of the Florida Pilot Program in Civil Defense Education was conducted from the viewpoint of a participant observer and from data gathered from official records. An instrument developed to gauge the extent to which the objectives of the program were achieved was sent to the 66 counties where the program had been implemented. Replies were received from 56. The Florida program was carried out in the school administrative units. Some of the implications of the success of the program at the local level were: the increase of interest and action in school and community survival plans, requests by adults for the Civil Defense Adult Education Class, discussions by adults of civil defense, motivation to learn about civil defense through mass media, publicity and civil defense programs by local radio stations, community groups, and displays, and emphasis on teaching civil defense at the elementary and secondary school level. Increased understanding is still needed concerning attitudes of adults toward civil defense.

- *287 A REVIEW AND ANALYSIS OF PARTICIPANT REACTION TO THE UNIVERSITY CIVIL DEFENSE EXTENSION TRAINING PROGRAM IN THE STATE OF FLORIDA. Goerke, Glenn Allan. Michigan State Univ., 65-1743, MF \$2.75, HC \$6.60, 140p., 64.

This study analyzed reactions of 87 participants in the Shelter Management and Radiological Monitoring Instructors courses offered by the Civil Defense Extension Training Program conducted by the Florida Institute for Continuing University Studies. Major findings included the following: (1) about 95% of participants were males and 86% were aged 39-59; (2) all but one had completed high school and 36 were college graduates; (3) 82 considered civil defense an essential part of the total defense effort; (4) 70% indicated that, at the end of the program, they had a more favorable view of the role of civil defense than before; (5) 84% rated class methods and lesson outlines very highly; (6) the experiences judged most valuable were those involving confinement in a shelter and use of radiological monitoring instruments; (7) trainees advised lengthening the program from one week to two weeks and limiting class size to 25; (8) they considered their training valuable and essential to survival, and expressed concern that the lay public was not aware of the necessity of such a program.

See also: SECTION 2210 COMMUNITY EDUCATION AND DEVELOPMENT; Item 405 participation in community cultural arts program; 42 drop-out in civil defense program

5550 COMMUNITY DEVELOPMENT PROGRAMS - FOREIGN

- *288 A STUDY OF THE COMMUNITY DEVELOPMENT PROGRAM IN INDIA. Vykuntapathi, Thota. Michigan State Univ., 66-8497, MF \$3.00, HC \$7.60, 164p., 66.

An outgrowth of missionary and volunteer efforts, the Indian Community Development Program has four objectives--(1) to assist each village in planning and carrying out integrated multi-phased family and village plans directed towards increasing agricultural production, (2) to improve health practices, (3) to provide the required educational facility for children and adult education programs for village women and youth, and (4) to provide recreational facilities. American extension principles and methods have influenced the Indian program to a great extent. Adult education is playing an important role in the program by creating new outlooks, new values, and new attitudes on the part of the people, and enlisting popular participation. Basic to the success of the Community Development Program is the staff's knowledge of extension methods. The Community Development Program's achievements include a change in the outlook of the village people, and an impressive record of progress in agriculture, minor irrigation, animal husbandry, village and small industries, social education, women's programs, health and rural sanitation, and communications.

- 289 THE PRESENT STATUS OF THE ANTIGONISH MOVEMENT IN NOVA SCOTIA. Sowder, Ellie Mae. George Peabody College for Teachers, 67-2898, MF \$3.00, HC \$5.80, 116p., 67.

A comprehensive case study is presented of the Antigonish Movement in eastern Nova Scotia. Originally founded to combat poverty and exploitation, it has functioned since 1929 under the extension department of

St. Francis Xavier University, Antigonish. The Movement brought education into the lives of ordinary working people and introduced group learning into adult education. It has had a strong influence in Canada and elsewhere in linking adult education with the cooperative movement, and has contributed to leadership training with its emphasis on group action. Primacy of the individual, social reform through education, and fundamental change in social and economic institutions are among its guiding principles. The early study groups and conferences, the "kitchen meetings," neighborhood short courses, leadership short courses, the rise of credit unions and various types of cooperatives, and (mainly since 1957) the people's School TV series and the social leadership diploma course at the Coady International Institute represent some major stages, programs, and accomplishments.

- 290 THE COMMUNITY DEVELOPMENT DIVISION OF ICA AND INTERNATIONAL EDUCATION. Shields, James J., Jr. Columbia Univ., 64-1504, MF \$2.75, HC \$9.70, Ed.D. thesis, 211p., 63.

In 1961, just before the International Cooperation Administration was reorganized as the Agency of International Development, this study investigated the role of education in intergovernmental programs in community development. It is based on the Community Development Division's files, its published and unpublished reports, documents in its library, and interviews with its Washington staff and the field staff returning from overseas in the Spring of 1961. The role of education in community development was traditionally seen as literacy training, community schools, and fundamental education. However, the Division's work was broad, functioning nationally and internationally, as well as on the village level. Its programs were carried on jointly by two nations, often of divergent cultures. New forms and functions were evident in the work of the community development advisor, the national training programs for development personnel, and participant training in the United States and third countries. In many ways, community development was one of international education's most dramatic testing grounds in the 1950's.

- *291 A THEORETICAL BASIS FOR ANALYSIS OF ADULT EDUCATION IN DEVELOPING COUNTRIES: A REVIEW OF ADULT EDUCATION PROGRAMS IN RURAL COMMUNITIES OF EASTERN NIGERIA. Odokara, Elijah O. Michigan State Univ., 67-7588, MF \$4.45, HC \$15.75, 348p., 66.

This study aimed (1) to develop a conceptual scheme for viewing adult education in a developing country; (2) to employ the scheme in analyzing the county council-sponsored adult education program in 34 rural communities in Eastern Nigeria; and (3) to make suggestions and recommendations for expanding and strengthening the programs. Using the areas of social, economic, political, and individual development, the investigator produced a conceptual scheme in the form of an analytical grid with some derived criteria, attributes, and items as a plan for analyzing the program of the selected communities. The analysis revealed that subject matter contents were inadequately related to the needs of the

clientele and educational purposes. Also creating a problem was the shortage of publicity and instructional materials. The government of Eastern Nigeria has done a commendable job in encouraging and promoting adult education schemes and programs in Eastern Nigerian communities through its various ministries in general and through its adult education headquarters at Owerri and Uyo in particular. These latter cooperate with the Extra-Mural division of the University of Nigeria.

- *292 THE DEVELOPMENT OF A CONCEPTUAL MODEL FOR PLANNING AND CONDUCTING TOWN MEETINGS WITH SELECTED TRIBAL ADULTS IN LIBERIA. Whitten, Willie Amazie, Jr. Indiana Univ., 66-12,696, MF \$3.45, HC \$12.15, Ed.D. thesis, 268p., 66.

This study which aimed at developing a conceptual model for planning and conducting town meetings with selected tribal adults in Liberia, collected data through literature search, surveys, appraisals, interviews, and experience. The five steps of the model were: determining the socio-cultural context of town meetings; appraising their educational significance; determining desirable educational conditions for town meetings; selecting appropriate educational procedures; and developing a final plan. The following educational conditions were identified as desirable: effective communication, responsible participation, shared planning, systematic learning experiences, and professional guidance in learning. Criteria for the selection of educational procedures and techniques included: topics and goals, available leadership, background of participants, the size of the group, and physical facilities. When utilizing these criteria the following techniques were considered appropriate for most town meetings: colloquy, demonstration, interview, speech, and symposium.

- *293 ASPECTS OF INTER-DEPARTMENTAL COORDINATION PROBLEMS IN INDONESIAN COMMUNITY DEVELOPMENT. Kayam, Umar. Cornell Univ., 66-4112, MF \$3.00, HC \$9.70, 215p., 65.

This study investigated general problems of interdepartmental coordination among community development agencies at the kabupaten (county) level in Indonesia. Emphasis was on the Department of Community Education and the Office of Social Affairs, both members of the Coordinating Body of Community Development. Questionnaire data were sought from Central Java and North Sumatra. Basic agency philosophies, structure, programs, and methods were compared. Opinions and reactions of kabupaten level office heads toward the Coordinating Body were examined, together with the amount of agreement among office heads as to the nature of community development and major tasks, the regional status and functions of the Coordinating Body, variables affecting coordination within this body, and the degree of satisfaction of the two offices over the present working arrangement with the Coordinating Body. It was concluded that, if the Indonesian government insists on the centralized coordination arrangement as the best way to insure the success of community development, the system must be modified, possibly

by shifting the coordination task to a regional official and integrating community development with county development programs.

- *294 POTENTIALITIES FOR COMMUNITY DEVELOPMENT IN A KEKCHI INDIAN VILLAGE IN BRITISH HONDURAS. McCaffrey, Colin. California Univ., 68-5779, MF \$5.65, HC \$20.05, 443p., 67.

Investigators spent six months in the Kekchi Indian village of San Miguel, British Honduras, where data gathering was combined with participation in agricultural and social activities and in practical community development. Respondents (85 men and youths) provided much informal data on attitudes relevant to community development, which were compared with those more rapidly gathered from 126 respondents in other villages. Findings included relative economic isolation and self-sufficiency, sixty-year history of migration and adaptation, industriousness combined with preference for communal labor, traditional lines of intuitive harmony and consensus in running the relatively new village council, and socioeconomic patterns favorable to experimentation. Literacy in English, a rice-drying floor, and a community center were prominent desires. Recommendations by investigators call for pig pens, rainwater collection or a well and pump, a literate helper for corresponding with government officials, and steps to improve school community relations. An outsider's greatest contribution might be to reassure Kekchis of their competence to develop many projects.

- 295 EDUCATION AND EXTENSION EDUCATION IN IRAN. Rassi, Jafar. Utah State Univ., 68-13,790, MF \$4.40, HC \$15.55, Ed.D. thesis, 343p., 67.

An assessment was made of the basic nature and function of three types of rural development activities (extension service, community development, advisory work) in Iran and of how a particular program or combination of programs might more effectively serve Iran or any other developing nation. Relationships and problems within and outside the school system were analyzed. A study of the educational philosophy of progressivism and extension education in relation to community development and advisory services helped formulate a more practical concept of rural out-of-school education. These were among the major conclusions: (1) in agrarian countries having both community development and extension, preliminary administrative coordination is essential, with emphasis on training of personnel; (2) advisory work, mainly concerned with rural economic development, is not suitable where the major problem is the lack of education; (3) if supported by progressive school education, extension education can help raise living standards rapidly.

See also: SECTION 5280 LITERACY EDUCATION - FOREIGN; Item 163 interest in adult education training among public agencies in Puerto Rico; 130 radio in community education in Ethiopia; 504 UNESCO fundamental education program in Thailand; 427 administrative problems in technical assistance to community and agricultural development; 390 tribal organization in Southern Sudan

5700 PROFESSIONAL, TECHNICAL CONTINUING EDUCATION

- *296 A STUDY OF CONTINUING EDUCATION NEEDS OF SELECTED PROFESSIONAL GROUPS AND UNIVERSITY EXTENSION CONTRACT PROGRAMS IN WYOMING. Nicholas, Robert A. Wyoming Univ., Ed.D. thesis, 207p., 66.

This study aimed to develop principles for a model program of continuing education for the professions at the University of Wyoming. The author reviewed the literature on the growth of the professions and on continuing education in the professions generally, with special reference to architecture, dentistry, law, medicine, and pharmacy. From this review and from consultation with members of the professions and university administrators, he developed 72 propositions relating to the organization and administration of continuing education programs. The propositions were rated by 48 administrators of university programs and by 39 leaders in the professions to assess their applicability in present practice and their desirability in an ideal program. The results of statistical analysis of the responses are interpreted in sections on extension guidelines, and program development, administration, professional responsibility, curriculum credits, evaluation, staffing and finance, and others. Recommendations for developing the University of Wyoming program are proposed. The rating form and 39 references are included.

See also: Item 273 administrative procedures in graduate education through university extension

5750 ENGINEERING

- *297 INDUSTRIAL SPONSORSHIP OF CONTINUING EDUCATION FOR ANTI-OBSOLESCENCE OF ENGINEERS AND SCIENTISTS. Wheeler, Edward Allen. Lehigh Univ., 65-11,320, MF \$3.00, HC \$8.20, Ed.D. thesis, 180p., 65.

This study examined the literature on professional obsolescence, and surveyed trends and practices in industry-sponsored education for engineers and scientists in 72 large aerospace, chemical, electrical, electronics, machinery, metals, and petroleum companies. Using data from conference proceedings, case studies were made of programs sponsored by selected electrical and electronics firms (notably General Electric and Western Electric). Trends were identified for objectives, programs, participants, administration, and program evaluation for the period 1955-70; emphasis on degree programs, more numerous technical courses, lower ages, broad job classification, higher degree backgrounds, more use of outside study facilities, larger allotments of study time, and limited assessment of sponsorship; and greater diversity of participants. Trends and practices related to objectives and administration apparently served to combat obsolescence, but those affecting programs and participants tended to limit continuing education opportunities for senior engineers and scientists. The antiobsolescence function of continuing education was not commonly studied by industry, and evaluation criteria for such studies were lacking.

- *298 A STUDY OF THE ROLE OF THE ENGINEERING MANAGER AND HIS CONTINUING EDUCATION REQUIREMENTS. McKee, Charles A. Michigan State Univ., 68-4181, MF \$3.70, HC \$13.05, Ed.D. thesis, 288p., 67.

The purpose of this study was to investigate the relationships among the perceptions engineering managers have of their role, their continuing education activities, and subject area needs, and among the expectations held for them by their immediate superiors, direct subordinates, and by engineering faculty outside the organization. Role theory was adopted as the conceptual approach. A questionnaire-schedule received from 199 engineering managers, 122 immediate superiors, 168 direct subordinates, and 50 engineering faculty members produced information about the role. The immediate superiors indicated a strong positive feeling on more items concerning the job functions of the manager than any of the other groups and the direct subordinates indicated a strong feeling on fewer items than the other groups. There was common agreement among all four groups on seven items of the 29. A higher degree of agreement existed between the engineering managers and their immediate superiors concerning the role of the manager than between any other groups. Lesser agreement existed in comparing the engineering managers and the engineering faculty, and in comparing the immediate superiors and the direct subordinates.

- 299 FACTORS RELATED TO PARTICIPATION IN CONTINUING EDUCATION AMONG A SELECTED GROUP OF GRADUATE ENGINEERS. Wiegand, Richard. Florida State Univ., 67-318, MF \$4.00, HC \$7.00, 149p., 66.

Factors related to participation in continuing education were explored by a questionnaire answered by 435 working engineers, all graduates of Georgia Institute of Technology, classes 1948-1963. Independent variables were educational background, job, geography, and personal characteristics. Dependent variables were the types of educational activities the engineer might attempt--course work, professional activities, reading and self-directed learning and correspondence study. Job-related factors seemed to determine participation to the greatest extent, although certain age-related factors, annual salary and marital status were also found to be operative. Younger men in cities, who had been at the top of their classes, favored course work, while older men were often participants in the activities of several professional societies. Participants in reading and self-directed learning could not be neatly delineated by the factors studied. The study includes a literature review, statistical analyses of the relationships among factors, and recommendations for further research.

- *300 EXECUTIVE DEVELOPMENT FROM SPECIALIST TO GENERALIST. Niemi, John Arvo. California Univ., 67-9894, MF \$3.00, HC \$9.45, Ed.D. thesis, 209p., 67.

A study was made of an innovative University of California (Los Angeles) program designed to help engineering executives become executive generalists and technical managers. The purpose was to learn: the degree to which program objectives were being met, effects of participation on managerial mobility, and the extent to which graduates altered

their interests and activities. Participants were younger (25-35) than those in business executive programs and seemed highly motivated to make up undergraduate grade-point deficiencies. Experience in interpersonal relations and study of group behavior were rated very high, but relating the engineer to society and his company to the broad environment was not. A need was seen for more business content, especially law and finance. The most immediate effect on the graduates' position was an increase in salary and prestige. The average mobility toward more responsible positions increased with number of years after graduation. There was a low adoption rate of business and quantitative decision-making tools. Despite a significant increase in informal learning activities, there was little change in professional membership and participation in community affairs.

- *301 COLLEGE ACHIEVEMENT AND INDUSTRIAL SUCCESS. Biedenbach, Joseph Maaron. Michigan State Univ., 65-6050, MF \$3.00, HC \$5.20, 104p., 64.

A group of 350 top and middle management engineering personnel from seven divisions of a large industrial firm were studied for differences between the two groups that could be used to aid in selecting engineering graduates for future industrial executives. Executive levels attained correlated directly with individual undergraduate achievement, which indicated a need for careful guidance and placement of graduating engineering students. High academic achievement in undergraduate training seemed to indicate a greater possibility of executive development. The amount of extracurricular activity participation in college, type of college attended, academic major pursued, and amount of expenses paid by the student himself were insignificant variables. The level of degree attained and the locality of the college attended were significant. Higher executives were more mobile.

5850 MEDICINE AND HEALTH

- 302 A SURVEY OF TELEVISION IN MEDICINE TO DETERMINE ITS UTILITY AS A MEANS OF CONTINUING THE MEDICAL EDUCATION OF THE PHYSICIAN. Harris, Jerome J. New York Univ., 65-4858, MF \$4.10, HC \$14.40, Ed.D. thesis, 319p., 64.

Using literature reviews and questionnaires, this study reviewed and obtained opinions on the use of television in medical continuing education for physicians. Phase I revealed that many doctors do not attend formal courses or spare sufficient time for detail men, conventions, colleagues, or other communication sources; that textbooks and other publications suffer from inherent publication delay or remain unread; and that medical schools are too hard pressed with undergraduate training to provide postgraduate physician education. These were among the other findings and conclusions: (1) television is used within about half of the 87 medical schools, but subject coverage is narrow and television remains an experimental medium; (2) most physicians surveyed would accept weekly programs on a fee basis, preferably as open circuit, scrambled broadcasts between 9 and 12 P.M. on Tuesday

or Wednesday; (3) costs and physicians' passive learning role could be major deterrents to more extensive telecasting, yet physicians showed a preference for passive learning; (4) from the standpoint of convenience, feasibility, and adaptability, television could provide a major share of physicians' continuing education.

- 303 PREDICTION OF ACADEMIC SUCCESS IN SELECTED UNITED STATES ARMY MEDICAL FIELD SERVICE SCHOOL COURSES. Stewart, Charles Allen. Texas Univ., 63-5260, MF \$2.75, HC \$7.40, 160p., 63.

An attempt was made to develop prediction systems for the identification of those students, in selected United States Army Medical Field Service School courses, who would be academically successful or unsuccessful. Two courses at the U.S. Army Medical Field Service School, Fort Sam Houston, Texas, were selected for study. They were: The Medical Laboratory Procedures (Basic) Course, and the X-Ray Procedures (Basic) Course. Data on 306 medical laboratory and 136 x-ray students were collected. Also selected were 38 predictor variables which comprised the individual's Army Classification Battery scores, his General-Technical aptitude score, certain "miscellaneous" information available from personnel records, data concerning the individual's performance in the Medical Training Center prior to school assignment, and the results of his performance on the California Psychological Inventory. Due to the number of students in the x-ray course, the group was divided into two samples but was treated as one unit. Similar to the first sample of medical laboratory students, all 38 predictors succeeded in identifying 14 of the 22 academic failures but erred in predicting as failures three individuals who later passed the course satisfactorily. A similar reduction in predictive accuracy occurred when the number of variables was reduced.

- *304 A STUDY OF WORK HISTORIES OF MARRIED NURSES. Willis, Lucy Dorothea. California Univ., 68-5682, MF \$3.00, HC \$11.50, Ed.D. thesis, 253p., 67.

This study dealt with married women as past, present, and future members of the nursing force. Respondents were 53 married women, aged 22 to 68, in the Moose Jaw, Saskatchewan, Health Region who had been registered nurses. Data were gathered on personal, family, and work history, motives for entering the nursing profession, and satisfactions and dissatisfactions experienced in nursing practice. These were among the findings: (1) young women tended to work after marriage until and sometimes after the first child, and tended to return after all the children were in school or sometimes a little later in the family cycle; (2) full-time workers had the longest, most stable work histories and were most likely to be working for financial reasons; (3) urban women were more likely than rural women to be working, but the latter were more aware of and more responsive to community needs for nursing service; (4) women returning to nursing generally spoke of inadequate facilities and opportunities for updating their skills and knowledge.

- *305 THE PRACTICAL NURSE: ROLE EXPECTATIONS HELD BY RELEVANT GROUPS. Hill, Marion E. H. Michigan State Univ., 64-7512, MF \$2.75, HC \$7.60, 162p., 63.

This study investigated the extent of agreement and disagreement in role expectations held by practical nurses, hospital directors, medical doctors, and three groups of professional nurses (administrators, non-administrators, clinical instructors) concerning the general, bedside, bedside-technical, technical and medical duties and responsibilities of practical nurses. Expected and actual roles were also compared. Data, including opinions expressed on a five-point rating scale, came from a questionnaire administered at eight Michigan practical nurse centers. Significant differences, more often related to general responsibilities than to duties, were seen in practical nurses' perceptions of their own expected and actual roles. Other significant differences emerged between practical nurses' perceptions and those of other respondent groups. Disagreement on expected roles was greatest (16 items out of 33) among registered nurse administrators and least (eight items) among hospital directors; while disagreement concerning actual roles was greatest (21 items) for registered nurse nonadministrators and least (11 items) for hospital directors.

- *306 THINKING PATTERNS: A STUDY OF LANGUAGE AS MIRROR OF EXPERIENCE AND GUIDE TO ACTION. Bircher, Andrea Ursula. California Univ., Berkeley, 66-15,347, MF \$4.05, HC \$14.20, 315p., 66.

This study investigated relationships among subjective experience, verbal formulations, and effective purposeful behavior in psychiatric nursing. The Quest (an unstructured, short paragraph paper and pencil test using 30 randomly chosen English words) was administered to a random sample of Northern California student nurses. A highly consistent pattern of language use emerged, virtually unaffected by characteristics of stimulus words or their referents, of the respondents, or of variations in educational or professional background. This pattern showed high concern with established standards and directives, repetition of directives, and narrative reporting about environmental aspects, other persons, and time-space relationships, but little or no concern with dynamic or action ideas, aspects of the future, goals to be sought, or higher levels of problem-solving and thought. Twelve different patterns of thought were identified and illustrated, and implications and possible uses were discussed for psychiatric nursing, adult education, and other fields. (Appendixes include The Quest and analyses thereof.)

- *307 CORRESPONDENCES AND DIFFERENCES IN THE PSYCHIATRIC NURSE'S ROLE AS PERCEIVED BY THE MENTALLY ILL PATIENT AND THE PSYCHIATRIC NURSE. Martin, Eugene Victor. California Univ., 66-3651, MF \$3.00, HC \$6.20, 130p., 65.

This study explored the correspondences and differences in the perception of the psychiatric nurse's role as perceived by psychiatric nurses and mentally ill patients as they interacted in nurse-patient relation-

ships. Patients diagnosed as having effective reactions and patients diagnosed as having schizophrenic reactions were asked to identify ways in which they had perceived the psychiatric nurse as helpful or unhelpful. The nurses were also asked to identify ways in which they had perceived themselves as helpful or unhelpful to the patients. Patients and nurses identified helpfulness and unhelpfulness in three areas: attitudes, the communication process, and the interpersonal process. The findings suggested significant implications for curriculum planning in the areas of Psychiatric Nursing and Adult Education. They also indicated that there were marked differences between the psychiatric nurses' perceptions of the significance of their attitudes and activities as they interacted with schizophrenic patients and the value attributed to the nurses' behavior by the patients.

- *308 AN ASSESSMENT OF INTERNATIONAL NURSING STUDENTS IN THE UNITED STATES: A CASE STUDY OF PHILIPPINE EXPERIENCE.** Bergamini, Sister Marie Carmen. California Univ., Berkeley, 64-12,540, MF \$4.60, HC \$16.20, 360p., 64.

This study explored three phases (predeparture preparation for American study, the educational sojourn in the United States, subsequent professional experience in the Philippines) of the cross-cultural educational experience of Philippine students in American nursing schools during 1957-61. The benefits of cross-cultural education and the improvements deemed necessary to attain educational goals were clarified. Dissimilarities noted by trainees between nursing practice in the United States and in the Philippines were seen as closely related to cultural and socioeconomic barriers to effectiveness. There was need for continuing study of the selection, preparation, and orientation of Philippine nurses entering American nursing schools, further examination of their experiences in American institutions, followup studies of returnees and nonreturnees, and further research on subsequent professional experiences.

- *309 NURSING ACTIVITIES DESCRIBED BY STUDENTS AS USEFUL FOR PROVIDING EMOTIONALLY SUPPORTIVE CARE TO PATIENTS.** Cohelan, Evelyn Ellis. California Univ., 64-2163, MF \$2.75, HC \$7.20, Ed.D. thesis, 154p., 63.

A study was made of characteristics of patients who needed emotionally supportive care from student nurses and of activities used by 202 students in five professional nursing schools to provide such care. Characteristics most often named were evidence of fear, loneliness, or depression; complaining, demanding, or uncooperative behavior; and the existence of social and economic problems, psychiatric disorders, or severe physical problems. Although most patients were receiving physical care, many student nurses did not cite physical care as a method of emotional support; most activities used were verbal, such as explaining the illness or treatment to the patient and advising on personal matters. Nurses averaged under three activities per patient, but those who had completed a course in psychosomatic nursing averaged five nursing activities per patient. Students from several schools

indicated helplessness and lack of satisfaction in caring for these patients. However, students in two schools indicated feelings of satisfaction and success.

- *310 A STUDY OF THE DUTIES PERFORMED BY MEDICAL ASSISTANTS. Modesitt, Charles C. Michigan St. Univ., 67-1661, MF \$3.00, HC \$6.00, 409p., 66.

The purpose of this study was to provide information on the activities of a clerical and semi-technical medical nature which are held by a competent office assistant in a medical organization, and to analyze and study the duties and responsibilities of medical assistants, for possible improvement of training programs. Fifty-six business-office activities were arranged in ten categories and were examined to determine how many of the 78 physicians' employees performed each activity. More than one-half of the office employees were employed in one-physician offices and the respondent was the only employee in one-fourth of the offices and held the title of medical assistant. The median number of years of employment by physicians was 5.75 years. Medical assistants performed nearly all business-office activities that are performed in physicians' offices and nearly all semi-technical medical activities performed in most physicians' offices. Personal services were performed to a much greater extent by medical assistants in one-physician offices than by those in clinics and hospitals. Medical assistants need a general educational foundation including anatomy and physiology.

- *311 THE ACCEPTANCE OF TRAINING AS PERCEIVED AMONG VOLUNTEERS IN A HEALTH AGENCY. Zeberl, Andrew John. Michigan Univ., 65-5165, MF \$2.75, HC \$8.80, 185p., 64.

The major purpose of this study was to gain a clearer understanding of the concept of training as held by volunteers in a health agency, and to define the factors that are related to their levels of acceptance of training. Nineteen hypotheses were developed from sociopsychological theory after a survey of the literature in ten related fields. Data collected from volunteers of one county unit were analyzed in terms of the hypotheses, through the use of statistical tests. Major conclusions of the study include: (1) volunteers are usually favorable to training if (a) they perceive their total past training experience as helpful toward their volunteer performance, or (b) they are less than satisfied with their total performance in the agency; (2) volunteers are open to training in numerous areas when they have performed in a variety of roles, but they are eager for training in activities in which they have had greatest participation; and (3) agency situation factors are more likely to be perceived as causing resistance to training than are factors related to the volunteers themselves.

5900 EDUCATION

- *312 A STUDY OF THE PROBLEMS OF SELF-DEVELOPMENT OF A SELECTED NUMBER OF ASPIRING PRACTICING SCHOOL SUPERINTENDENTS. Williams, Roy Tillman. Boston Univ., 66-12,810, MF \$4.25, HC \$14.85, Ed.D. thesis, 329p., 64.

A survey of school superintendents participating in three inservice seminars held in 1962 collected information on perceived competencies for performance of role, perceived need for further development of competencies, forces impelling or restraining this development, and resources needed for this task. Data were gathered through interviews. It was found that knowledge of community and curriculum, human relations skills, attitude of commitment, belief in rights of the individual, and interest in community activity were competencies perceived as most important; knowledge of social sciences, skills of organizational ability, attitudes of optimism and belief in public education and interest in students were most highly developed competencies. Outstanding deficiencies were knowledge of finance, business skills, and financial management. Forces encouraging development of competency were the forces of change, and desires to serve and succeed. Discouraging forces included lack of money and time, and family obligations. Colleges and universities were seen to play the key role in development of competencies. Implications for effective planning of preservice and inservice educational programs are included.

- 313 THE ROLE OF UNIVERSITY EXTENSION IN MEETING THE INSERVICE EDUCATION NEEDS OF SCHOOL DISTRICTS. Schulman, Benson R. California Univ., 64-9364, MF \$2.75, HC \$6.80, Ed.D. thesis, 143p., 64.

The role of University Extension of University of California, Los Angeles, in meeting inservice education needs of school districts in Los Angeles, Orange, Riverside, San Diego, Santa Barbara, and Ventura counties was studied by reviewing University policies governing University Extension, and policies and needs of school district inservice education. Information was collected through interviews with school district and University Extension personnel, review of literature, and surveys of 135 school districts by questionnaire. University policy limits extension programs by: requiring programs to be supported by fees; not permitting selection of instructional personnel, course offerings, or budget development; and limiting courses to undergraduate and professional accreditation. School district policies included: use of incentives to encourage employee participation in inservice education; emphasis upon central office administration of programs; acceptance of assistance from outside institutions; and preference for graduate study. Among inservice education problem areas treated by extension courses in 1961-1964 were mathematics, social studies, science, foreign language, reading, language arts, counseling services, and child study.

- 314 A STUDY OF COURSES IN EDUCATION OFFERED BY STATE COLLEGES AND UNIVERSITIES OF LOUISIANA IN WHICH INSERVICE TEACHERS WERE ENROLLED. McCollister, John Carl, Jr. Louisiana State Univ., 64-8809, MF \$3.25, HC \$11.50, 251p., 64.

The problems of this study were: (1) to determine the status of the facilities, services, and enrollments relative to courses in education offered by state colleges and universities (excluding Negro institutions) of Louisiana in which inservice teachers were enrolled during the spring semester, 1969, and, (2) to determine how well they met the needs and/or desires of the inservice teachers. Information for the survey was obtained from administrators and instructors of the courses, the inservice teachers, and college and university catalogs, brochures, and course schedules. The information was analyzed and categorized so that the resulting data were presented in three divisions according to extension, inservice campus, and total courses. The investigations indicated that: in general, the needs and/or desires of inservice teachers enrolled in courses were being met satisfactorily; extension courses seemed to be superior to inservice campus courses in terms of registration procedures, use and quality of audiovisual equipment, and course locations; and inservice campus courses possibly were superior to extension courses in supplying adequate reference materials, quantity of audiovisual equipment, special materials, and physical facilities for classrooms.

- *315 A FOLLOWUP STUDY OF OPINIONS HELD BY STUDENTS, FACULTY AND ADMINISTRATORS ABOUT OFF-CAMPUS UNIVERSITY CREDIT COURSES. Bailey, Frederick Sidney. Michigan State Univ., 65-14,195, MF \$3.00, HC \$6.40, 135p., 65.

This investigation updated a study made in 1952, surveying the same population with the methods and questionnaire used in the earlier study. All the students (mainly public school teachers) enrolled in the off-campus courses of four Michigan universities, their faculty, and the Intermediate School District Superintendents in Michigan were surveyed. Opinions of the three groups toward these programs were determined, together with modifications teachers made in teaching techniques after completing the courses. Two conclusions were: (1) the students, faculty, and superintendents feel the off-campus programs should be expanded to provide more courses and improved library services; (2) little has been done to improve correspondence courses or off-campus centers with adequate library and audiovisual resources. After taking the courses, teachers were more democratic and allowed their students to participate in classroom planning. All three populations felt that off-campus credit courses are more valuable than correspondence courses.

- 316 THE ROLE OF THE GUIDANCE COORDINATOR AS CONSULTANT IN THE INSERVICE EDUCATION OF TEACHERS IN ALABAMA. Warner, Josephine F. R. Columbia Univ., 64-1509, MF \$3.85, HC \$13.50, Ed.D. thesis, 297p., 63.

Ways in which guidance counselors can help teachers develop ability in guidance were assessed in this study, primarily based on data collected during 1957-58, with recent pertinent data added. Descriptions and evaluations were made of such inservice education methods as staff meetings, conferences, professional reading and associations, team teaching, work experiences, and travel, and for lectures, films and film discussions, demonstrations, television, case studies, critical incidents, and manuals. Tape-recorded interviews, made with over 100 Alabama administrators, supervisors, guidance workers, and classroom teachers, indicated several changes needed in Alabama schools. Activities appropriate for guidance coordinators in inservice teacher education include assisting with a child's problems, creating and maintaining services in which teachers are co-workers, providing opportunities for conferences and casual contacts, participating in curriculum and administrative planning, evaluating guidance services and facilities, and keeping informed of avenues of inservice growth.

- 317 FACTORS RELATED TO SUCCESS IN FIFTEEN NDEA COUNSELING AND GUIDANCE INSTITUTES. Bernos, Edwin Charles. Florida Univ., 65-5978, MF \$2.75, HC \$5.20, Ed.D. thesis, 104p., 64.

In a study of factors relating to success in National Defense Education Act (NDEA) Counseling and Guidance Training Institutes, participant data (including measures of personality, achievement, aptitude, and interest plus eight criteria of counselor candidate success) were factor analyzed separately by sex. Criteria were ratings by institute staff members (global criterion), six sections of the NDEA Comprehensive Examination (NDEACE), and grade point averages in NDEA courses (NDEAGPA). Fifteen factors were found for men and 16 for women. Two factors accounted for 90% of male variance, while 11 were required to cover 80% of female variance. Except for NDEACE Guidance, success on the NDEACE in male and female samples was related primarily to aptitude for guidance courses. This aptitude appeared to be specific, with only slight relationship to the Miller Analogies Test or the Ohio State University Psychological Examination. NDEAGPA of females were primarily related to verbal flexibility; both NDEAGPA and the global criterion for males were primarily related to an unnamed factor. The largest portion of female variance on the global criterion was negatively related to a need to supervise and dominate others and a need for order and lack of change.

- 318 THE FUTURE ROLE OF THE HIGHEST RANKING WOMAN STUDENT PERSONNEL ADMINISTRATOR IN THE COLLEGE OR UNIVERSITY AND A SUGGESTED TRAINING PROGRAM. Haller, Lola Marie. Michigan State Univ., 68-4146, MF \$3.00, HC \$7.00, Ed.D. thesis, 147p., 67.

This study sought to define the future role of the highest ranking woman student personnel administrator in a college or university and to suggest an appropriate training program. Data on relevant historical factors, influential background and educational characteristics, potentially influential educational and societal concepts, and suitable

characteristics and background were obtained from the literature and by interviews with acknowledged leaders in college student personnel administration. Findings indicated that the role of these administrators is shifting from basically custodial to primarily administrative and educational. The new role may involve some administrative responsibility in coordinating personnel services and working with students of both sexes, and interpretation of women's special educational needs to the students, faculty, and administration. The recommended doctoral program would be interdisciplinary, with course work in such areas as psychology, sociology, business, and personnel work, together with an internship. Further research on recruitment, motivation, and other topics was also urged.

- 319 AN INVESTIGATION OF THE EFFECTS OF SPECIAL INSERVICE TRAINING PROGRAMS FOR WORK WITH DISADVANTAGED CHILDREN AS VIEWED BY DIRECTORS AND PARTICIPANTS. Ponder, Edward Gene. Columbia Univ., 68-2437, MF \$3.70, HC \$12.85, Ed.D. thesis, 285p., 67.

In order to make a contribution to inservice education for people working in disadvantaged areas, a followup study of twelve selected NDEA Institute programs, from preschool through grade six, was made. A questionnaire was sent to the director of each of the 12 training institutes to: seek information regarding their views of the effects of their programs upon the participants; obtain a description of the program offered; and secure names and addresses of participants enrolled in each of the institutes. The 12 directors were allowed to review the participant questionnaire before it was distributed. The data gathered from both directors and participants indicated that the formal class sessions and/or seminars (including T-groups), coordinated with practicum, were helpful to participants. Respondents seemed to evidence carry-over from the institute experiences into their subsequent work in six areas. Based upon a frequency count, in descending order, they were: classroom procedures, parent-community relations, sociopsychological characteristics of disadvantaged children, administrative and organizational structure of schools, materials of instruction, and inservice education. However, respondents had difficulty in transmitting their newly acquired techniques and experiences.

- 320 AN EVALUATION OF THE INSERVICE PROGRAMS ORGANIZED BY THE EXTENSION SERVICES DEPARTMENTS OF NORTHERN ZONE IN INDIA DURING THE PERIOD (1961-1965). Ahmad, Dabir. University of Arkansas, 67-8708, MF \$3.00, HC \$8.20, Ed.D. thesis, 176p., 67.

The survey of extension services of the Departments of the Northern Zone (India) of the Directorate of Extension Service Programs for the Secondary Schools Education explored kinds of services performed, how needs of teachers were determined, and how the services could be improved. Related literature was summarized and critically analyzed, including Annual Reports of the Directorate of Extension Programs for Secondary Education, and issues of "Teacher Education." A brief review of inservice training programs in Arkansas, New York City,

Delaware, New Jersey, and South Bend are included. It was found that inservice teacher education employed techniques such as workshops, seminars, school visits, evening courses, lectures, demonstration lessons, study groups, exhibitions and library service. No trend of diversified inservice education or planning for programs was revealed. Teachers were being helped to develop an experimental outlook and to become aware of recent developments in educational theory and practice. Recommendations were based upon these findings for program improvement.

See also: Item 77 internship for secondary principals; 92, 101, 103 human relations, sensitivity training for various educators; 114 traveling science demonstration for inservice training; 70 art program for elementary teachers

5950 LAW

- *321 RELATIONSHIP BETWEEN THE CAREER CHANGES OF LAWYERS AND THEIR PARTICIPATION IN CONTINUING LEGAL EDUCATION. Taylor, Edward Bunker. Nebraska Univ., 67-10,682, MF \$3.00, HC \$8.40, 181p., 67.

Data for a study of the relationship between career changes of lawyers and their participation in adult education were collected from questionnaires returned by 615 members of the Nebraska Bar Association, 51 personal interviews, and studies of work histories to classify lawyers as changeable or relatively stable in their careers. Lawyers who attended the largest number of adult education activities were law school graduates, below 35 years of age, who were earning \$40,000 or more per year. Most lawyers were admitted to the bar and experienced special life events between the ages of 25 and 29, and experienced career changes between 30 and 34 years of age. "Change" lawyers participated in adult education, including legal seminars, at the start of their professional careers, during changes, and when they experienced special life events. Lawyers' participation in adult education increased steadily with the length of their professional careers. Periods of job change and participation in adult education coincided significantly only during the first ten years of legal practice. The relationship between the number of lawyers who experienced special life events and their participation in adult education was most significant up to the age of 39 and between the ages of 45 and 49 years.

6000 CLERGYMEN

- *322 AN ANALYSIS OF CHANGES IN ATTITUDES OF PARTICIPANTS IN SELECTED CLERGY ECONOMIC EDUCATION PROGRAMS. Reinbold, John Clifford. Indiana Univ., 65-14,063, MF \$3.00, HC \$6.20, Ed.D. thesis, 130p., 65.

An assessment was made of clergymen's attitude changes toward American agriculture, business, and labor as a result of participation in educational programs sponsored by the Clergy Economic Education Foundation. Differences in pretest attitudes toward these institutions were also evaluated. Subjects (87 participants from Florida, Kentucky, and Ohio)

were administered Forms A and B of the Purdue Master Attitude Scale before and after completion of the program. Participants were also categorized by years of formal education, college experience in economics, age, father's occupation, size of congregation, and size of community of present residence and of longest residence. Only in the Ohio program did participants, as a group, show significant change; namely, a more negative attitude toward American business. Differences in pretest attitudes were of little significance. Attitude changes for the total sample were most strongly related to congregation size (over or under 400) and father's occupation (minister or not). It was concluded that these programs do not accomplish the desired attitude changes, and that most participants enter with such positive attitudes that little further change can occur.

6050 PUBLIC ADMINISTRATION

- 323 EMPLOYEE TRAINING AND DEVELOPMENT: A STUDY OF TRAINING OPERATIONS UNDER THE GOVERNMENT EMPLOYEES TRAINING ACT OF 1958, WITH SPECIAL REFERENCE TO THE DEPARTMENT OF THE NAVY, 1958-1962. Decker, Camille E. The American Univ., 64-2721, MF \$3.75, HC \$13.05, 289p., 63.

Employee training operations in the Department of the Navy were analyzed and appraised, with emphasis on the years 1958-62, when training activities under the Government Employees Training Act (Public Law 85-507) were being inaugurated. Basic concepts of public personnel administration were summarized, early legislative efforts in support of training were reviewed, and a brief legislative history of the Act was developed. Interviews with key Navy Department personnel, literature on public personnel administration and employee training, and the author's own experience were among the sources of data. Training for such groups as apprentices, management interns, and student trainees in science and engineering, including opportunities for professional and specialist continuing education, was being provided through government and non-government facilities. Conclusions were discussed in terms of needed improvements in such areas as trainee evaluation and followup, study of retention of employees trained, analysis of attrition during training, and attention to difficulties arising from the Act itself.

- 324 STATE EMPLOYEE DEVELOPMENT, COMMONWEALTH OF PENNSYLVANIA, 1955-63. Duren, Gaylord. Pennsylvania State Univ., 64-13,394, MF \$2.75, HC \$6.60, Ed.D. thesis, 138p., 64.

This study was designed to examine the activities of the Commonwealth of Pennsylvania in providing inservice training and employee development for its personnel from 1955 to 1963. The data were obtained from: secondary materials and governmental documents; the personal papers of Governor George M. Leader; file materials covering the period of Governor David L. Lawrence's administration; and interviews with administration; and interviews with administrators who participated in the training programs. The period marked a turning point in the development of

training for state employees in Pennsylvania. Initially, training for state and local employees was stimulated by the Federal Government through grant-in-aid programs. The attainment of an integrated training organization proved to be impossible during the period of this study. The reasons were: lack of supporting legislation, inadequate financing, patronage requirements and procedures, shortages of professional and subprofessional personnel, dispersed administrative responsibility mandated by statutes, and a general cultural milieu which made low standards of employee performance acceptable. Personnel training was financed chiefly out of appropriations for general administrative expenses and despite many obstacles, a large amount of training was undertaken. At the close of the period under study, the training function had been widely accepted and stabilized in the executive branch.

6100 MILITARY PROFESSIONS

- 325 A COMPARISON OF BEHAVIOR STYLES BETWEEN ENTERING AND GRADUATING STUDENTS IN OFFICER CANDIDATE SCHOOL. Petersen, Peter Barron. George Washington Univ., M-1282, MF \$3.00, HC \$7.20, M.B.A. thesis, 153p., 67.

This study is a comparison of the average behavioral styles between a group of entering and graduating students in an army officer candidate school. The instrument used is the Job Analysis and Interest Measurement. There is a significant difference in the mean scores between entering (n=561) and graduating (n=319) students in four pre-chosen comparisons established by four hypotheses. Entering students compared with graduating students place a higher value on the approval from others. In the three scales considered by the other hypotheses, the mean graduating students' scores are higher than the entering students' scores. This indicates that: Graduating students as compared with entering students tend to be more self-assertive, are more likely to be persuasive leaders, and are more prone to like supervisory activities.

6125 SOCIAL WORK

- *326 A TRAINING PROGRAM FOR MARCH OF DIMES WORKERS. DiVencenti, Marie Phillipa. Indiana Univ., 65-14,034, MF \$3.00, HC \$9.90, Ed.D. thesis, 216p., 65.

The problem of the study was to develop and test a training program for county workers who conduct the annual March of Dimes fund-raising campaign. Subjects were Mothers' Marchers, who were divided between an experimental and a control group. Training was given to the experimental group only. Both groups were given a posttest (identical to the pretest) and a program evaluation instrument. Findings favored the experimental group significantly in terms of increased knowledge about the National Foundation and fund raising and of attitude change (favorable) toward soliciting funds. There was a slightly significant

difference favoring the experimental group in attitude change (favorable) toward the National Foundation. All 20 experimental subjects reported becoming better informed on the National Foundation; 16 of them reported becoming more favorably disposed toward soliciting funds. The training program was judged to be effective. A six-step program-planning procedure used successfully in other settings was readily adaptable to the training of March of Dimes workers.

See also: Item 498 participation of board in decision making in voluntary group service agencies

6150 TECHNICAL EDUCATION

- 327 TECHNICAL EDUCATION CURRICULAR RECOMMENDATIONS BY MANAGEMENT REPRESENTATIVES OF MANUFACTURING ESTABLISHMENTS IN ILLINOIS. Arnold, Joseph Paul. Illinois Univ., 65-7065, MF \$3.00, HC \$6.40, Ed.D. thesis, 134p., 65.

The problem studied is whether or not a group of technically qualified management personnel of manufacturing establishments which employ technicians will exhibit more general views toward post high school technical curricula than will technicians themselves. A sample of manufacturing establishments was selected from those plants in Illinois with 200 or more employees. A total of 130 respondents was utilized from 40 plants; 1 technician and 1, 2, or 3 management respondents from each of the same plants. Statistical tests were used to assess the relationships between generality of curricular selections and the variables--age, educational attainment, company size, and length of time with present employer. Two-way analysis of variance, chi square, and product moment correlation were used in the testing of research hypotheses. Insignificant differences (.05 level) indicated that, on the criterion of generality, technicians tend to agree with management. It was concluded that the occupational level as structured in this dissertation is not a basis for nomination of members for educational advisory and curriculum committees. If one assumes that certain management personnel are in key positions to identify educational needs of technicians, the technician himself should be considered as occupying a similar position.

- 328 THE FEASIBILITY OF ESTABLISHING A PROGRAM TO TRAIN COMPUTER PROGRAMMERS UTILIZING A TIME-SHARING SYSTEM AND REMOTE DATA-COMMUNICATIONS TRANSMISSION TERMINALS. Hardwick, Arthur Lee. Oklahoma State Univ., 66-8416, MF \$3.00, HC \$8.40, Ed.D. thesis, 182p., 67.

A study was conducted in Oklahoma on the problem of whether and to what extent it is feasible to establish a program to train computer programmers and systems analysts using a time-sharing system and remote data communications transmission terminals. Specific training requirements were reviewed. A survey was made of potential employers of trainees from the proposed educational program to determine present needs, numbers of computer programmers and systems analysts presently employed,

the anticipated number of computer programmers and systems analysts needed in 1966-67, 1968-69, and 1970-71, and necessary qualifications for data processing personnel. Other procedures included a survey and analysis of published material on the subject, a survey of the background of data communications, and a comparison involving economic factors and training requirement of a data communications system. It was concluded that the system is workable; that it has a sound basis both from an economic and a systems standpoint; and that it can provide all the training requirements established in the study and offer a curriculum which will greatly enhance the position of graduates. Several recommendations were suggested concerning curriculum requirements and systems design.

- 329 ELECTRONIC TECHNICIAN PERSONNEL AND TRAINING NEEDS OF IOWA INDUSTRIES. Weede, Gary Dean. Iowa State Univ. of Science and Tech., 68-2872, MF \$3.00, HC \$6.60, 137p., 67.

The purpose of this study was to provide data for use in developing or improving electronic technology programs. A postal card questionnaire was sent to 678 manufacturing and processing industries in Iowa employing more than 50 persons and all electrical, electronic, and precision instrument manufacturers employing fewer than 50 persons. Data were compiled from the main questionnaire, completed by 115 firms employing 99,045 persons, and from interviews with representatives of the 11 industries employing 10 or more electronic technicians. The firms reported a need for 205 electronic technicians by January 1, 1968 and 544 by 1972. Although a definite need was indicated, it varied with the size of industry, product manufactured, and geographical location and was difficult to predict beyond 1 year. The main source of technically trained electrical personnel was in-company training programs. Questionnaire responses indicated that training is needed in nine basic disciplines--mathematics, basic principles of physics, shop operations and related information, technical drawing, A-C and D-C circuits and machines, electronic components and circuits, use and repair of test equipment, TV circuits, and data processing. It was felt that similar studies should be conducted for electronic technicians in the communications and computer servicing industries.

- 330 TECHNOLOGICAL CHANGE AND THE NEED FOR EDUCATIONAL ADJUSTMENT. Kraft, Richard Horst Paul. California Univ., 68-5752, MF \$3.00, HC \$7.60, 161p., 67.

Case studies were made in 1966 in German industry and technical universities to formulate and test hypotheses about the adjustment of technical higher education to technological change, and to collect information on occupational and educational relationships for future manpower research. Theoretical aspects of manpower forecasting were discussed, including conversion of occupational structures into structures required by educational qualifications. The views of industrial officers, employers, and academic staff members were obtained, and the earnings of 8,806 engineers and technicians were investigated. Findings showed

neither a shortage of engineers nor technicians in the electrical industry nor underutilization of highly educated manpower, but data suggest future shortages unless the system of technical education better reflects the wishes of industry. Contrary to the weight of opinion in industry, most academic staff members felt that higher technical education should stress a broad intellectual foundation. The rate of monetary return was higher at the technician than the diploma level. More flexible educational requirements, better differentiation of engineer and technician functions, and extensive, long-range research were recommended.

6200 MANAGEMENT AND SUPERVISORY DEVELOPMENT

- 331 CRITICAL ISSUES IN THE DEVELOPMENT AND ADMINISTRATION OF ADVANCED MANAGEMENT EDUCATION COURSES SPONSORED BY SELECTED UNITED STATES BUSINESS CORPORATIONS. Curcuro, Edmond Harvey. Columbia Univ., 64-1554, MF \$3.80, HC \$13.30, 295p., 63.

The purpose of this study was to analyze critical issues arising when companies develop and run their own advanced management education courses; it focused on the terminal, collegiate type, management education courses conducted by selected United States Business Corporations during 1961. Research resources were interviews and discussions conducted with over 100 company executives, course administrators, university faculty and consultants. Among conclusions were: companies should limit specific objectives to cover one or two subject areas; a team of top management educators and the internal company staff group should be used to make certain that the course meets company needs and contains rigorous intellectual content; and continuing top management support, a successful pilot course, and favorable "feedback" from participants are essential. Major lessons learned were that companies should conduct their own course when (1) the size of the company precludes sending all eligible executives to university programs within a reasonable period of time; (2) there are adequate financial resources to sustain a professionally conducted program for approximately 10 years; and (3) there exists a philosophy of management that will permit executives to experiment with concepts suggested in the courses.

- 332 AN EVALUATION OF UNIVERSITY EXECUTIVE TRAINING. Huneryager, Sherwood George. Illinois Univ., 63-5105, MF \$3.85, HC \$13.50, 300p., 63.

The effectiveness of the four-week Executive Development Program at the University of Illinois was studied. The program is designed to stimulate improvement in job performance and executive skills. To assess the ultimate impact of this executive program, a questionnaire and interview study was undertaken covering a period of five program years, and included 61 participants and 57 top management officials from sponsoring firms. Three principal aspects of this training experience were evaluated: the general reaction of participants to the structural aspects of the program; the impact of the program upon job

performance; and its effect on selected personal skills and feelings of participants. Data showed that the overall reaction of participants and their companies was, at time of attendance, and still is, highly favorable. A majority of both groups indicated that the objectives of the program, especially those oriented toward improving human relations skills and broadening individual perspectives, were successfully achieved. It was found that the passing of time did not diminish participants' feelings toward the value of this training.

- 333 A STUDY OF THE EDUCATION AND FORMAL MANAGEMENT TRAINING OF CHIEF SALES EXECUTIVES OF LARGE INDUSTRIAL GOODS FIRMS. Vizza, Robert F. New York Univ., 68-5377, MF \$3.50, HC \$12.40, 272p., 67.

This study sought to determine the educational and training background of chief sales executives, and their superiors, in large industrial firms, and their opinions on educational and training requirements for sales executives of the 1980's. Respondents were surveyed as to past education and training, opinions regarding future requirements, the executive training role of colleges and industry, and objectives of undergraduate and graduate business education. Five hypotheses were also tested. Most sales executives of large industrial firms held at least a baccalaureate degree; most of those with graduate degrees had majored in business administration at the graduate level. Respondents tended to have B.S. degrees, little graduate education or formal management training, and a strong preference for professional education as opposed to liberal arts, for future industrial sales executives. Business schools at both the undergraduate and the graduate level were judged essential, and colleges were charged with the major responsibility for the continuing education of executives. Major recommendations were on research and on business courses for nonbusiness students.

- 334 THE IMPROVEMENT OF INDUSTRIAL MANAGEMENT DEVELOPMENT PRACTICES: AN EVALUATION OF THE EFFECT OF ENCOURAGEMENT, TRAINING, AND INSPECTION ON SUPERVISORS' DEVELOPMENT ACTIVITIES. Miccio, Joseph Vincent. New York Univ., 66-5785, MF \$3.00, HC \$9.45, Ed.D. thesis, 207p., 65.

This study investigated the effect of encouragement, inspection, and training on the effectiveness of supervisors' developmental activities with their subordinates. Treatment groups were established on each variable. A specially developed questionnaire was administered, before introduction of the study variables and again six months afterward, to subordinates who reported on the developmental activities of their supervisors. Multiple-range Tests and Students "t" Tests were used to assess the significance of changes following introduction of the study variables. Students "t" Tests showed no significant differences directly attributable to the variables. The lowest one-third ranking supervisors in each treatment group were comparable to a "national average" level of supervisors; and changes in the mean scores of these groups also proved insignificant. When an analyses was made of scores by the lowest ranking third of the supervisors on ten recommended activities, only five of the 30 comparisons among treatment groups

showed significant changes. Thus, the significance of the variables, particularly encouragement and training combined, was not substantiated. Several recommendations were made for improving future studies of this type. (The document includes 11 tables, 12 appendixes, and numerous references.)

- 335 INSERVICE TRAINING AND DEVELOPMENT PROGRAMS FOR ACCOUNTANTS IN BUSINESS AND INDUSTRY. Adams, Hobart Warren. Indiana Univ., 67-11,682, MF \$4.05, HC \$13.20, D.B.A. thesis, 313p., 67.

A survey was made of inservice training and development for accountants in 53 selected business firms varying in products, sales volume, and employees. Program philosophy and objectives, qualifications and selection of trainees and instructors, program content, instructional programs, and evaluation procedures were examined. Inservice programs, largely on the job and characterized by individual coaching and counseling, had as their major aim the development of managerial talent. Expected qualifications, in terms of personal traits and academic achievement, were high. Accounting majors were preferred. Evaluation of trainees, instructional personnel, and the overall program was relatively informal, with job performance as the chief criterion. Collegiate accounting education was more general because of varying student interests and abilities. Increasing emphasis on managerial accounting in colleges reflected the emphasis on management development in inservice programs. The major weaknesses of inservice programs lay in training philosophy and evaluative procedures.

- 336 TRAINING AS A CHANGE AGENT: A CONSTRUCTIVE EVALUATION. Belasco, James Allen. Cornell Univ., 67-8755, MF \$5.85, HC \$20.70, 458p., 67.

To determine what happens as a result of a training experience and why certain effects of training show up in only some participants, a series of six two-hour seminars in handling problem employees was given to front line non-academic university supervisors. The Solomon Four Group Evaluation Design and questionnaires were used. Criteria changes were small in relation to training alone, but some sharp changes were associated with the completion of the questionnaire alone. More change was produced when training was preceded by questionnaire completion. Research interviewing made a strong training impact on supervisory morale, self-concept, and identification with the organization. Analysis of all tests and measures showed that individuals most likely to change after training had, in descending order of predictive potency: high tolerance of ambiguity, high self-esteem, high authoritarianism, high intelligence, female sex, younger age, and less experience. Role expectations were the single best predictor of change. (Appendixes include outlines of training, copies of handouts, listening techniques questionnaires, tables of results, and a bibliography.)

- 337 AN EMPIRICAL INVESTIGATION OF THE EFFECTIVENESS OF EXECUTIVE DEVELOPMENT PROGRAMS AS PERCEIVED BY PARTICIPATING MARKETING AND SALES EXECUTIVES. Trickett, Wilson L. Michigan State Univ., 68-4228, MF \$3.00, HC \$6.00, 122p., 67.

A study of the effectiveness of executive development programs for marketing and sales executives tested three hypotheses: (1) participation in such programs results in identifiable benefits as perceived by the participants; (2) academically oriented executive development programs have significant advantages over company-oriented programs as perceived by participants; and (3) program benefits as seen by participants are enduring. Phases of the study were an evaluation of a 2 1/2 week Graduate School of Sales Management and Marketing (1962), a questionnaire survey of 84 management and marketing executives (1964), and a followup evaluation in 1965 of the effectiveness of the programs. The hypotheses were basically substantiated. However, there was relatively little enthusiasm for company programs as compared to academically oriented programs. Three major features of the more successful programs were: (1) participants had both the desire and the capacity to develop; (2) the best qualified instructors were university faculty with a business or business consulting background; (3) the curriculum fitted executives' daily employment needs, used the best learning techniques, and involved discussion among participants and with faculty.

- *338 AN ANALYSIS OF SELECTED EDUCATIONAL, SOCIAL, ECONOMIC, AND POLITICAL OPINIONS HELD BY BUSINESS LEADERS. Bircher, Jack Lawrence. Indiana Univ., 65-2361, MF \$2.75, HC \$4.80, Ed.D. thesis, 94p., 64.

Selected educational, social, economic, and political opinions of certain business leaders in four Midwestern cities were surveyed with a special 50-item questionnaire based on principles of the 1960 Republican platform. The opinions were compared with those of "New Frontiersmen." Analysis of results revealed liberal-conservative tendencies as follows: (1) in educational opinions, the businessmen were 100% liberal and the New Frontiersmen, 96% liberal; (2) on social matters, the businessmen were 52% liberal and the other group, 88% liberal; (3) in economics, the businessmen were 85% conservative and the other group, 68%; (4) in political opinions, 90% of the businessmen were conservative and 56% of the other group were liberal. Findings suggest that, in the cities represented, adult education might be accepted by some corporations if related to discussions of current social problems.

See also: SECTION 5700 PROFESSIONAL, TECHNICAL CONTINUING EDUCATION; Item 106 simulation in business training; 301 college achievement and business success; 442 day and evening students, Temple University Business School; 373 pesticide education for dealers; 274 effects of AACSB standards on evening business schools; 75 teaching techniques in human relations training; 82 programmed instruction in Air Force fiscal account training; 98 effects of human relations training on supervisors

6300 LABOR EDUCATION

- 339 THE TRADE UNION IN THE ECONOMY AS A FACTOR IN THE DIFFERENTIAL DEVELOPMENT OF WORKERS' EDUCATION IN GREAT BRITAIN AND THE UNITED STATES. Robinson, James William. Duke Univ., 68-3441, MF \$3.00, HC \$9.90, 220p., 67.

This study sought to determine why British and American labor education programs have differed; how present divergences differ from those of the past; and to what extent the characteristics of unions and of industrial relations explain the differences. Judicial and legislative restrictions led to British labor unions' involvement in partisan political activity early in their development; and because of reliance on economic and political pressures by the unions, British labor education was general, and lacked union participation. In the United States, reliance on collective bargaining within a regulated industrial relations system led to emphasis on union functions in labor education. Since World War II, British unions have been devoting more resources to labor education and have provided training in bargaining and administration to secure improved economic benefits. However, American labor education has shifted its attention from economic to social concerns and now includes more social science instruction, often by non-union organizations.

See also: Item 392 adult education program, UAW Local 412; 91 discussion in university labor education program

6500 OCCUPATIONAL TRAINING

- 340 THE ROLE OF LIBERAL STUDIES IN POSTSECONDARY VOCATIONAL EDUCATION DURING AN ERA OF INCREASING AUTOMATION. Jamgochian, George Richard. Claremont Graduate School, 67-9549, MF \$3.00, HC \$7.40, 158p., 66.

Although the growing importance of postsecondary vocational education in our society has been receiving widespread attention, these programs aim at specialized training with specific terminal goals; they resolve only part of human problems. Psychological, sociological, political, and moral needs remain untouched. Since there is more to man's life in a free society than his work, vocational training should be more than just job training per se. Liberal studies can prepare persons for citizenship in a free government, keep him in a better harmony with his environment, help him understand society, give him knowledge and judgment to choose worthy objectives, enable him to live a more satisfying life, and serve as a counter-balance to the low level of mass culture. Possible areas where integration between vocational education and liberal education can occur are: (1) investigating the particular vocation within the scheme of the social economy, and (2) studying the rationale of the scientific method within the technical processes, inventions, and fundamental ideas that are in the work of a given specialty.

- 341 THE STRUCTURE OF RELATED INSTRUCTION IN WISCONSIN APPRENTICESHIP PROGRAMS. Crabtree, James Stephen. Wisconsin Univ., 67-16,918, MF \$3.65, HC \$12.85, 283p., 67.

A study was made of enrollment patterns, curricula, instructional staff, instructional costs, and other aspects of collateral instruction for apprentices in Wisconsin vocational schools. Primary data sources included the State Apprenticeship Division, State Board of Vocational Education, the Executive Secretary for the Circuit Program, and vocational schools. Personal interviews were held with selected state and school administrators. Findings included the following: (1) in 1966, 406 related instructional programs were offered in 79 trades at 37 vocational schools; (2) apprenticeship enrollments ranged from 0.8% to 6.9% of vocational school enrollments; (3) enrollment was flexible, and instruction stressed individual rather than group orientation; (4) trades taught by circuit faculty had standardized state curricula, but not courses taught by resident faculty; (5) circuit teachers surpassed resident teachers in percentages having tenure and degrees, and in years of teaching and related experience; (6) instructional costs, averaging about \$207 per apprentice, were highest where enrollments were smallest.

- 342 A FOLLOWUP STUDY OF GRADUATES' AND EMPLOYERS' OPINIONS OF A COOPERATING TRAINING PROGRAM. RESEARCH STUDY NO. 1. Tuttle, David Chester. Colorado State College, 65-267, MF \$3.00, HC \$5.40, Ed.D. thesis, 110p., 65.

Interviews collected information from 135 graduates of the trades and industrial cooperative education training program, and 30 employers in Des Moines, Iowa, to appraise the effectiveness of training in relation to post high school employment. Graduates and employers commented on the value of core area training, school counseling, and different phases of the training program. It was found that the primary reasons for enrolling in the program were to gain work experience and earn extra money. Personal feeling and family influenced choice of core area. Sixty-two percent of the graduates were working at, or in, areas related to their high school training. Satisfaction was expressed with training, present job, and the school counseling and coordinating service. Employers believed that training helped graduates secure employment and receive promotions. Graduates felt that core-area training could be improved by more production training and wider experience on shop equipment, while employers thought additional training in production work, business ethics, and employment procedures should be included in the core-area training.

- 343 EXPLORATORY STUDY OF RELATIONSHIPS BETWEEN SELECTED ASPECTS OF HOME ENVIRONMENT AND EMPLOYMENT CRITERIA OF THE HUSBAND. Souder, Mary Fern Vanpool. Iowa State Univ. of Science and Technology, 67-8936, MF \$3.30, HC \$11.70, 256p., 67.

The objectives of the study were to identify characteristics of home environment which appear to be related to employment history of the husband; test methods of obtaining information; and develop a rationale consistent with the findings and including hypotheses to be tested. Criteria for selecting a sample of 40 employees of a midwestern manufacturing firm in a non-metropolitan area were based on marital status, employment of wife, number of children, age, educational background, and earnings. The employees were divided into two groups based on salary level. The methods of analyzing the data were the development of case studies, comparison of the two-criteria groups based on means, and an examination of intercorrelations among variables. Of the means for the home-environment variables, 80% were higher for Group 2 (higher salaries) than for Group 1. Additional home environment variables were positively related to one or more of employment variables: type of clothing worn by the husband to work, extent to which he selected his own clothing, number of suggestions by the wife for house improvement, number of newspapers and magazines received, educational level of the wife, and her attitude to her husband's job.

- *344 A COMPARATIVE STUDY OF THE EFFECTS OF VOCATIONAL TRAINING ON THE CAREER PATTERNS OF HIGH SCHOOL GRADUATES. Bournazos, Kimon. Michigan State Univ., 64-7487, MF \$2.75, HC \$8.80, 192p., 63.

A study was made of the influence of vocational education and personal background factors on the career patterns of 116 white, male high school graduates in Michigan and of their labor market activities. An experimental group (with two or more years of trade and industrial education or training) was used, together with control groups from public and parochial schools. Among the conclusions were: (1) vocationally trained graduates had greater job stability than others; (2) fathers' and sons' occupational groups correlated positively; (3) high school grades and current wages correlated positively; (4) the most common means of job seeking were by direct application and through friends and relatives; (5) military service apparently played no significant part in vocational preparation. Recommendations included more research, improved research methods, increased high school cooperation with the Michigan Employment Security Commission to improve job placement, and greater involvement by the armed forces, labor and management, and continuing education facilities in vocational education.

- 345 VOCATIONAL AND TECHNICAL EDUCATIONAL NEEDS OF THE ADULT AND OUT-OF-SCHOOL YOUTH IN SOUTH DAKOTA. White, Leland Walter. Texas A and I Univ., 67-267, MF \$3.00, HC \$8.00, Ed.D. thesis, 171p., 66.

The purposes of this study were to determine: (1) if the present South Dakota vocational education program was adequate, (2) what the 1970 projected needs of industry in South Dakota would be, (3) what broad areas of training should be included in an adequate state program, and (4) what was the most feasible plan for implementation of the program. Data were gathered from three major sources: (1) the

United States 1950 and 1960 Census, (2) official records of the United States Employment Security Office, Aberdeen, South Dakota, and (3) official records of South Dakota Department of Public Instruction. Dispersion rates were determined for both age and occupations for each census year. Conclusions were: South Dakota provided vocational education for 5,321 persons in 1965, and projections indicated that: by 1970 13,321 persons will require vocational education; six multi-county vocational schools should be established and strategically placed to serve the state adequately; and training was required for craftsmen, clerks, salesmen, operatives, service and private householders. (Included in the appendixes are: the letters used, a representative two-year business curriculum of South Dakota's institutions of higher learning, and a bibliography.)

- 346 PSYCHO-SOCIAL CHARACTERISTICS OF SECONDARY SCHOOL VOCATIONAL TRAINEES RATED BY THEIR INSTRUCTORS AS HAVING POOR WORKER POTENTIAL. Johnson, Donald Henry. Wisconsin Univ., 66-9926, MF \$3.00, HC \$8.60, 188p., 66.

A study was made of 269 boys and 388 girls enrolled in "capstone" courses in 30 cooperating schools of Wisconsin's Pilot Program in Vocational Education. The purpose was to identify psychosocial characteristics of secondary school trainees rated by their teachers as having poor employment potential. Characteristics were analyzed in terms of ratings of on-the-job performance and of the probable acceptability of the student as an employee. Data were obtained on intelligence, achievement, school grades, father's occupation, parental educational levels, wage aspirations, educational and vocational plans, career objectives, expected entry jobs, attitudes toward geographic mobility, work orientation, work model identification, work and achievement value orientations, subject-matter preference, major life satisfactions, and self-ratings. Boys rated as potentially poor performers were relatively low in intelligence, grades, aspirations, achievement value, and self-image. Girls similarly rated tended to be relatively low in the same areas. However, girls and boys were judged on somewhat different sets of criteria. Boys rated as unemployable showed characteristics frequently attributed to workers who often fail to find jobs or are often dismissed. (The document includes 48 tables, 133 references, and appendixes.)

See also: Item 481 transfer of military skills to civilian life; 247 MMPI as predictor of vocational rehabilitation success; 228 interests of career women; 250 adjustment of graduates of prison program; 212 work values and satisfaction with retirement; 242 rehabilitation of functionally psychotic veterans; 230 achievement motive in women; 225 retraining older female workers; 231 business status of married women college graduates; 199 methods for followup of vocational school graduates; 173 training needs in North Carolina trade-technical institutes; 169 part-time vocational instructors in Michigan community colleges; 177 effectiveness of vocational teachers

6550 UNSKILLED, DISADVANTAGED

- 347 AN EVALUATION OF RETRAINING PROGRAMS FOR UNEMPLOYED WORKERS IN THE UNITED STATES. Levine, Marvin Jacob. Wisconsin Univ., 64-3927, MF \$5.45, HC \$19.35, 427p., 64.

The extent and effectiveness of public and private retraining programs for reentry of unemployed workers into the labor force are reviewed. Literature, reports, and records, and correspondence with government, management, and union officials were examined. Included is a case study of trainees and nontrainees in a midwestern redevelopment area which seeks to determine the significance of personal characteristics on propensity for retraining. It was found that financial obstacles hinder retraining programs in smaller industries, unions, and state vocational and training systems. Although federal programs under the Area Redevelopment Act of 1961 and Manpower Development and Training Act of 1962 have placement rates of 70%, the long-term unemployed who are functional illiterates and cannot qualify for retraining have not been reached. The case study demonstrated that the unskilled trainee group was able to qualify for retraining because of higher educational levels and showed a greater willingness to relocate. The nontrainees were underemployed, and family and financial obligations hindered improvement. It was concluded that basic literacy programs are essential for retraining programs; relocation to areas where jobs exist is necessary; training programs must adapt to shifting technological demands; and the vocational education system must eliminate training in obsolete skills.

- 348 MANPOWER DEVELOPMENT TRAINING IN ALABAMA. Langdon, Charles Watson. Alabama Univ., 67-13,244, MF \$4.65, HC \$16.45, 364p., 67.

This study aims at: the evaluation of the Manpower and Development Training Act (MDTA) of 1962 (and its two amendments) as a tool for reducing unemployment; the examination of the state of Alabama and Federal government framework for implementation of MDTA; and the survey of the results of retraining the unemployed in Alabama during the first three years of the Act's existence. Some of the more important sources of information were: the statistical summaries of the Office of Manpower, Automation and Training (OMAT), U.S. Department of Labor publications, and interviews with officials of the Alabama State Employment Service. The Act focuses on the stabilization of national employment at or below the 4% level; yet, at the 3.7% level 3 million individuals are unemployed, one million did not seek employment, and an estimated over one million were underemployed. During the first forty and one-half months that the Act was in effect there were a total of 6,000 enrollees in Alabama, and 275,000 in the nation. In this state 73.7% completed their courses. The percentage for the United States was 76.2%. However, at least twice as many unemployed needed training. The percentage of employed among MDTA "graduates" was 65.1 for Alabama, while that of the nation was 74.0%.

- 349 RETRAINING UNDER THE MANPOWER DEVELOPMENT AND TRAINING ACT: AN ANALYSIS OF PRACTICES USED IN THE SELECTION AND RETRAINING OF THE UNEMPLOYED IN THE KNOXVILLE AREA. Lockert, Aeolian Edward. Tennessee Univ., 66-180, MF \$3.00, HC \$8.00, Ed.D. thesis, 174p., 65.

This study aimed at investigating conditions and practices in the re-training of workers under the Manpower Development and Training Act and interpreting the implications of these findings for the development of area vocational-technical schools. Personal interviews were held with employment service representatives to ascertain procedures used in the selection of candidates for MDTA training. Data concerning the basic characteristics of trainees and rejectees were secured from the files of the Knoxville Employment Office. These data included information on the age, education, length of employment, work experience, and sex and family status of trainees and rejectees. Of the 1,180 candidates 957 failed the screening procedures. Sixty-three of the rejectees were unemployed youth under 21. Many of them were handicapped by low educational attainment, lack of elementary skills, and faulty attitudes toward work. Thirty-seven were 45 years of age and over. They had low educational background and/or knowledge of routine jobs which no longer existed. Thus many unskilled and uneducated were screened out of MDTA programs.

- 350 AN EVALUATION OF THE SOCIO-PSYCHOLOGICAL AND SOCIO-ECONOMIC EFFECTS OF MDTA TRAINING ON TRAINEES IN SELECTED MICHIGAN PROGRAMS. Jones, Darrell George. Michigan State Univ., 67-1644, MF \$3.00, HC \$7.60, 265p., 66.

In an MDTA training program a comparison was made between trainees' sociopsychological and socioeconomic status before and three months after the program and also with the status of matched controls (interested persons who had not entered the course) three months after. Groups were matched on sex, ethnic group, age, education, marital status, General Aptitude Test Battery scores, interest in the same program, and residence in the same labor market area. Data were obtained from 151 trainees in 13 programs in four metropolitan areas and from 151 paired controls, also from interviews with instructors, and from administration of four selected scales of the California Psychological Inventory, the Gough-Sanford Rigidity Scale, and the Laslow Security-Insecurity Inventory. After three months of training, there were no differences between the numbers of trainees and controls who were employed, voluntarily underemployed, or involuntarily unemployed. Though more controls than trainees were in the highest pay category (perhaps because of longer participation in the labor market), trainees were definitely better off in terms of wages following training and felt greater job satisfaction. Trainees improved significantly in sociability and ranked higher than controls.

- 351 AN EVALUATION OF THE MANPOWER DEVELOPMENT AND TRAINING PROGRAM IN THE LINCOLN, NEBRASKA PUBLIC SCHOOLS. Grell, Darrell Dean. Nebraska Univ., 67-15,986, MF \$3.00, HC \$7.20, Ed.D. thesis, 151p., 67.

This study evaluated the effectiveness of the Manpower Development and Training Program (MDTP) as conducted by the Vocational and Adult Education Department of Lincoln, Nebraska Public Schools during its first three years of operation. The sample consisted of 389 MDTP students in the clerical, practical nursing, and dental assistant programs, and 123 employers of MDTP graduates. Findings included the following: (1) Manpower graduates became satisfactory employees; (2) the Lincoln, Nebraska programs had a higher percentage of employed graduates in training-related fields, and a larger percentage of satisfied employers, than reported in national studies; (3) graduates were satisfied with the courses offered and considered their training valuable in preparing for future employment; (4) respondents felt that program length was satisfactory and that the number of absences allowed was fair; (5) Lincoln Manpower students spent over seven hours a week in study outside the classroom; (6) employers named dependability as the outstanding trait of Lincoln Manpower graduates.

- *352 THE EFFECTIVENESS OF THE FERNDALE, MICHIGAN, PUBLIC SCHOOL ADULT EDUCATION PROGRAM IN ENHANCING JOB OPPORTUNITIES FOR SCHOOL DROPOUTS. Giordano, Enrico Alfred. Michigan State Univ., 65-1742, MF \$2.75, HC \$5.60, 114p., 64.

An analysis was made during 1958-62 of the effectiveness of the Ferndale, Michigan, public school adult education program in enhancing job opportunities for dropouts, and of the effectiveness of present course offerings. Only 46 of the 96 dropouts surveyed undertook further study. Thirty participated in public school adult education in Ferndale; 16 attended nonschool continuing education classes. Fifteen of the 30 changed jobs as a result of the Ferndale program and to areas of employment for which adult education had prepared them, while all 16 of the nonschool continuing education group received work for which they had been trained. The study showed that there was little communication between secondary school personnel and those involved in the adult education program. While high school dropouts knew that the program could enhance occupational adjustment, little had been done to encourage their participation. A need was indicated for a better liaison between high school and adult education faculties and for followup services and a more comprehensive guidance program for dropouts.

- 353 EDUCATION AND POVERTY. Ribich, Thomas I. Princeton Univ., 68-2513, MF \$3.45, HC \$12.15, 268p., 67.

This study focused on the measurement and interpretation of income gains resulting from the improved education of poor persons. Several kinds of education (job retraining, dropout prevention, compensatory education, preschool programs, increased expenditures per pupil) were examined in terms of efficiency (average cost versus average returns) in alleviating poverty. Comparable efficiency measures were devised for each variety and the resulting estimates were contrasted. These estimates were supplemented with an overall evaluation of the benefits

from education. Major conclusions were: (1) vocationally oriented training, at least in the form of recent manpower training programs, shows a higher payoff rate than conventional education; (2) benefit-cost ratios do not seem to justify emphasis on early school or pre-school years; (3) benefit-cost ratios appear to rise from adding expenditures to school districts that are now spending relatively little; (4) general education probably results in bigger second generation effects, greater psychological returns, and more such intangible benefits than vocational education.

- 354 A STUDY OF SCHOOL DROPOUTS IN BOURBON COUNTY TO DETERMINE THEIR NEEDS FOR VOCATIONAL EDUCATION. Falkenstine, James C. Kentucky Univ., Ed.D. thesis, 255p., 65.

The study was made to analyze the dropout situation in Bourbon County (Kentucky) to determine the needs of out-of-school youth between the ages of 15 and 21 for vocational education. The survey and library research methods were used. Three groups of out-of-school youth were surveyed: 216 dropouts in 1964, 73 in 1962-63, and 236 selective service inductees from 1960-63. Of questionnaires sent to 282 dropouts in Bourbon County, 216 usable ones were returned. A majority of the dropouts were males, 16 to 19 years old. Most of the males were single, while the majority of the females were married. Nearly half of the females had children. Most of the dropouts left school between the 8th and 11th grades. The four most common reasons for withdrawal were: lack of interest, lack of school success, marriage, and economic reasons. Many of the males would be willing to attend classes at the Lafayette Vocational-Technical School if transportation were provided for them. About a third of the dropouts indicated that they would be interested in a work-study type program.

- 355 PSYCHOLOGICAL NEEDS AND VOCATIONAL MATURITY OF MANPOWER TRAINEES. Bartlett, Willis Edward. Ohio State Univ., 68-2950, MF \$3.00, HC \$7.00, 149p., 67.

A study was made of the psychological needs and vocational maturity of 158 trainees enrolled in nine skill areas (general office clerk, electrical appliance repair, welder, cook, baker, food service, service station mechanic, sewing machine operator, clerk-typist) in a Manpower Development and Training Act center. Trainees were given the Vocational Maturity Scale (VM) of the Vocational Development Inventory and 15 scales of the Adjective Check List during the first week of training. Records were also obtained of age, last school grade completed, congruence of occupational choice with skill area training, and whether the individual continued training after the first month. Based on findings, it was concluded that: the VM scale seems related to achievement and dominance needs; vocational maturity differs among various skill areas; in view of the great overlapping of psychological needs scales from one skill area to another, a trainee's needs could apparently be met through his being in almost any skill area; the VM scale

is apparently related to the last grade completed in school; trainees with psychological characteristics compatible with deference to classroom activities continue after the first month while other trainees do not.

- 356 AN EXAMINATION OF CERTAIN VARIABLES ASSOCIATED WITH PERSONAL AND SOCIAL ADJUSTMENT CHANGE IN SCHOOL DROPOUTS ENROLLED IN A RETRAINING PROGRAM. Quinn, Benjamin Richard. Oklahoma State Univ., 66-4063, MF \$3.00, HC \$7.00, Ed.D. thesis, 149p., 65.

In the Oklahoma City Dropout Retraining Program, personal and social adjustment changes were studied in 160 participants who were placed into: (1) combination training, (2) vocational training, or (3) academic training groups, and compared with a control group divided into early redropout and no treatment groups. The relationship of personal and social adjustment change to certain personal and family history characteristics were also examined. Three major scales of the California Test of Personality assessed adjustments. It was found that the control groups showed greater change than the experimental groups in social and total composite adjustment, and none of the experimental groups showed change when compared to each other. This was also true for the two control groups. When personal and family history characteristics were analyzed, it was found that married students had a greater degree of positive change in terms of social adjustment than did single, divorced, or separated students. The major conclusion reached is that if a goal of personal and social adjustment is desired, some type of treatment directed to this end must be incorporated in the program, since involvement in training programs does not automatically bring about such changes.

See also: SECTION 4750 DISADVANTAGED GROUPS; 5230 ADULT BASIC EDUCATION: Item 392 union sponsored MOTA program; 13 delayed gratification and training of disadvantaged

6600 CLERICAL, SALES

- 357 A GUIDEBOOK FOR EDUCATIONAL ACTIVITIES FOR PROFESSIONAL SECRETARIAL GROUPS. Wright, Melvin Lamar. Columbia Univ., 66-4519, MF \$3.95, HC \$13.95, Ed.D. thesis, 306p., 64.

This guidebook is intended to aid members of professional secretarial groups in the planning, carrying out, and evaluating of commonly undertaken educational activities. It explains and illustrates commonly used educational activities: workshops, conferences, conventions, study groups, short courses and institutes and suggests other ongoing educational activities that can be initiated and carried out by members of professional secretarial groups. In addition, explanations and illustrations of a number of methods for use with the educational activities are included. Educational activities selected for the guide-

book are those which were unique, educationally sound, and capable of being carried out by members of professional secretarial groups without unduly interrupting the main job of the members of those groups.

- 358 ANALYSIS OF IN-COMPANY AND OUT-OF-COMPANY EDUCATIONAL AND TRAINING PRACTICES FOR CLERICAL WORKERS OF LEADING FIRMS IN THE GREATER BOSTON AREA. (VOLUMES I AND II). Tedesco, Eleanor Hollis. Michigan State Univ., 68-4226, MF \$8.55, HC \$30.40, Ed.D. thesis, 673p., 67.

This study was concerned with the present and future status of company training for clerical workers among firms in the Greater Boston area, descriptions of formal training programs that these companies provide for their clerical workers and ones conducted by out-of-company agencies. Questionnaires were used to secure information about present and future training practices from managerial personnel representing 645 companies. For data concerning the structure of formal training programs, interviews, observation, participation, and printed or duplicated office materials were used. Findings included the following: companies prefer to train their own clerical workers; large companies have many training opportunities; there is a gap between training provided by schools and the clerical training required for on-the-job performance; technological changes indicate a need for training in data processing and technical secretarial skills; and valid evidence concerning the value of training programs is lacking.

- 359 EDUCATIONAL NEEDS AND DESIRES OF SAVINGS AND LOAN EMPLOYEES AS PERCEIVED BY INTERESTED PERSONNEL OF SAVINGS AND LOAN ASSOCIATIONS. Hamilton, Kellis Arthur. Colorado State College, 65-14,813, MF \$3.00, HC \$8.40, Ed.L. thesis, 182p., 65.

The purpose was to differentiate possible courses of action based on the perceptions of knowledgeable and/or interested savings and loan personnel that might add to the continued improvement of the training of savings and loan employees. A mailed questionnaire was used for collecting the data after being subjected to a pilot study. It contained three parts: "Areas of Study," "Aspects," and "Topics for Study," and the respondents were requested to select and rate items related to the five "Areas of Study" they chose as the most important of the ten areas listed. A total of 100 reactions were requested from each respondent. Usable returns were received from respondents representing 173 of the 271 savings and loan associations in the United States that comprised the random sample. Several tests--chi square, rank correlations, and a coefficient of concordance--were used on the data to indicate the representativeness of the sample, the reliability of the questionnaire, and the agreement among responses. Findings included the following: (1) there was similarity of perceptions among personnel of savings and loan associations and from different geographical regions; (2) the importance of needed and/or desired "Areas of Study" were perceived not to be the same between respondents from associations of different asset sizes.

- 360 GUIDELINES FOR ESTABLISHING POST-SECONDARY DISTRIBUTIVE EDUCATION PROGRAMS IN OHIO. Lucas, Stephen Rodney. Ohio State Univ., 68-3018, MF \$3.00, HC \$7.80, 170p., 67.

In Ohio, a study was made of elements in the development and operation of a postsecondary distributive education midmanagement program (PSDEP) which received majority agreement from selected state supervisors, teacher educators, and postsecondary instructors of distributive education, and from employers. A questionnaire with 39 controversial questions was given to 147 respondents. Results showed substantial agreement within and among groups. Majority agreement ranged from 87.2% to 97.4% in each of the four groups on 25 of the 39 items. Six of the other 14 received majority agreement in three groups and eight received majority agreement in two groups. Major recommendations included: an advisory committee, consultation by representatives of the state department of public instruction, a regional need and interest survey, use of educational institutions of various types, an associate degree, PSDEP operation on a cooperative basis involving work experience, curriculum planning for specific employment areas, and PSDEP participation in the postsecondary division of the Distributive Education Clubs of America.

- 361 A CRITICAL ANALYSIS AND AN EVALUATION OF THE SECRETARIAL PROGRAMS IN THE UNIVERSITY COLLEGE OF THE UNIVERSITY OF CINCINNATI. Bright, Don Emerson. Cincinnati Univ., 67-15,943, MF \$4.00, HC \$14.20, 311p., 67.

The executive secretarial, medical secretarial, and legal secretarial programs of the University College of Cincinnati were analyzed and evaluated. Data were analyzed to determine: historical development of the secretarial program; alumnae and current secretarial student evaluations of the programs; requirements for secretaries hired in medical, legal, and general offices; and the general pattern of junior colleges throughout the United States. Cincinnati's programs were compared with this pattern. It was found that: business and related courses are planned according to community and societal needs; teachers come from business and industry as well as teacher institutions; and business and industry advisory committees influence course content and class instruction. Some recommendations were: administer placement tests in shorthand and typing skills to new students; train medical secretaries primarily in secretarial skills; familiarize students with different office machines; and provide students with a basic year in secretarial skills before they enter an area of specialization.

- 362 PERFORMANCE OF TRAINEES IN AN INTENSIVE INSERVICE TRAINING PROGRAM IN BEGINNING SHORTHAND AND TRANSCRIPTION. Watto, George. Indiana Univ., 64-5146, MF \$4.60, HC \$16.20, Ed.D. thesis, 358p., 63.

Trainee performance was studied in an intensive inservice training program in beginning shorthand and transcription. Relationships were analyzed between levels of total skill growth and the following characteristics: mental maturity; listening and reading comprehension; per-

sonality; skill in typing, shorthand, and applied English; character, attitude, and industriousness; and ability to comprehend and retain instruction. Data were obtained through initial testing, observation of trainees during instruction, periodic interviews with trainees, examination of their daily classwork, and achievement testing. The most successful trainees were average or above average on most personality factors, and above average in character, attitude, industriousness, and ability to comprehend and retain instruction. The least successful were generally below average on personality factors, average in character, attitude, and industriousness, and below average in comprehension and retention of instruction. Although only average in most respects, the training group showed superior growth in knowledge of shorthand theory and above average growth in shorthand recording speed.

-6650 SERVICE

- 363 ROLE LEARNING FOR POLICE RECRUITS: SOME PROBLEMS IN THE PROCESS OF PREPARATION FOR THE UNCERTAINTIES OF POLICE WORK. McNamara, John Harold. California Univ., 67-11,263, MF \$4.05, HC \$14.20, 315p., 67.

The recruit training program of the New York City Police Department was studied to identify and clarify organizational and social psychological problems pertaining to the legality of police actions, prestige of police officers, interpersonal methods effective in police work, and organizational factors in the department. Data were obtained from participant observation, department records, role-playing exercises, the critical incident technique, and questionnaires given to recruits during training and one and two years after graduation. Many gains from formal training tended to disappear or be reversed in the field, where conditions were often at variance with training content. It was concluded that the "semi-military" model for the Police Academy and the department was inappropriate for many levels of duty, and that the use of negative sanctions and the attempt at an appearance of close supervision hindered development of self-directing, autonomous policemen. Contradictions between formal and informal organizations in the department were also a hindrance. Problems of police inactivity, organizational loyalty, and innovation were linked to problems in training.

- *364 AN ANALYSIS OF WORDS AND TERMS RELEVANT AND IMPORTANT TO THE STUDY AND TEACHING OF POLICE ORGANIZATION AND MANAGEMENT IN THE AMERICAN MUNICIPAL POLICE SERVICE AND RECOMMENDED DEFINITIONS. Eastman, George Daniel. Michigan State Univ., 66-6120, MF \$3.00, HC \$6.60, Ed.D. thesis, 139p., 65.

The study aimed at identifying, analyzing, and evaluating relevant and significant terms in writings on business, police, and educational organization and management; and developing improved definitions of these words and terms so as to make possible improved communication between police administrators, social scientists, and educators. A review and analysis of available literature provided the basis for: (1) identify-

ing already available definitions sufficiently precise and meaningful to serve the purpose of effective communication without modification; (2) synthesizing from two or more available and reasonably appropriate definitions one which would be suitable; and (3) developing new definitions wherever the first two processes were unfruitful. Of the 80 words and terms included in the study, only one fell in the first grouping above. Although many fell into the second, most required complete structuring. Most "definitions" reviewed and analyzed were rather general discussions of words or terms and thus served neither the purpose of this study nor the needs for precision or adequacy.

- 365 AN ANALYSIS OF THE CUSTODIAL TRAINING PROGRAMS IN INDIANA SCHOOL CORPORATIONS. Wargo, John George, Jr. Indiana Univ., 68-4757, MF \$3.00, HC \$6.20, Ed.D. thesis, 126p., 67.

Custodial training programs were surveyed and analyzed in Indiana to: determine number employed, assess attitudes of school administrators toward training of custodians, locate school corporations with custodial handbooks, and ascertain opinions of administrators regarding custodial services. Information cards on custodial training were received from 235 schools. Questionnaires were then mailed to the 56 school corporations with training programs. It was found that few training programs existed, and the apprenticeship method was used by the majority of schools. Demonstrations by supply companies salesmen were used to increase knowledge of experienced custodians. No college classes or correspondence courses were used to train custodians. The primary area of instruction was in housekeeping and employment practices and benefits, but educational purposes, aims, and objectives or custodial evaluation methods were not included, nor did school corporations have custodial handbooks. Evidence reveals that the position of custodian will continue to increase in importance and training programs should be developed cooperatively by school corporations and vocational schools.

6700 AGRICULTURE, HOME ECONOMICS

6710 UNITED STATES

- *366 DETERMINING THE COMPETENCIES NEEDED FOR EMPLOYMENT IN NON-FARM AGRICULTURAL OCCUPATIONS WITH IMPLICATIONS TO CURRICULUM DEVELOPMENT. Matteson, Harold Raymond. Wisconsin Univ., 66-4570, MF \$3.45, HC \$11.95, 265p., 66.

The major purpose of this study was to determine the competencies needed for employment in non-farm agricultural occupations with implications for curriculum development. The population comprised the employers of 410 non-farm agricultural businesses in eight counties representative of non-farm metropolitan Wisconsin. Vocational agricultural instructors in each selected county provided the researcher with the names of all agricultural business employers in their county. A questionnaire was prepared and sent to each of the identified employers. The data were analyzed under five major variables: academic subjects, public relations

skills and/or knowledges, farming experience, and vocational agricultural training. The subjects which the employers agreed were most valuable for both employment levels were: mathematics, English, and economics. Those subjects which employers considered to be of little value were foreign language, history, and geography. A consensus did not exist among the employers as to the value of science and mathematics as requirements for initial employment and promotion. (The appendix includes the questionnaire and tables showing the tabulated results of the investigations).

- 367 THE EDUCATIONAL NEEDS OF BEGINNING FARM OPERATORS IN BECOMING ESTABLISHED IN FARMING IN NEW YORK. Pearce, Frank Charles. Cornell Univ., 65-3135, MF \$4.75, HC \$16.90, 371p., 64.

An investigation was undertaken to determine those situational and individual characteristics of beginning farm operators which influence their comprehension and competence in becoming established in the occupation of farming. A list of beginning farm operators was gathered from key informants in each county in the state, and an interview schedule was prepared to be administered to a stratified random sample of the operators. A theoretical construct was devised and the educational need systems to be considered in the investigation were evolved for use in the schedule. Schedules were edited following data collection and the information coded for computer analysis. Data were analyzed using cross tabulations, correlation matrices and regression equations. Results indicated that there is a need for programs of instruction in agriculture in order to establish beginning farm operators in farming. These programs should vary because of the differences in educational needs among farmers. However, one can predict the educational needs of farmers on the basis of certain educational characteristics, of which reading habits are the best single criterion. There are also direct relationships between educational needs and individual characteristics of farmers, and an inverse relationship between felt and unfelt educational needs.

- 368 FULL-TIME FARMERS AND PART-TIME FARMERS IN A LOW-INCOME AREA OF NORTHERN NEW YORK STATE: A STUDY OF THEIR SOCIOECONOMIC CHARACTERISTICS. LeRay, Nelson Ludwig, Jr. Cornell Univ., 66-40, MF \$3.00, HC \$9.90, Ed.D. thesis, 218p., 65.

Comparison of the socioeconomic characteristics of full-time farmers and several subtypes of part-time farmers in St. Lawrence County, New York, was undertaken, based on data obtained from personal interviews with 206 farmers. The county is a dairy area in northern New York State with relatively low incomes and high rates of unemployment and underemployment. The research verified a typology of four subtypes of part-time farmers, and significant differences between full-time and part-time farmers; it cast doubt that part-time farmers are a homogeneous group. Of the subtypes of part-time farmers tested, the off-farm-work part-time farmer (operator of a farm with income of less than \$2,500, value of agricultural products sold of less than \$2,500 whose

major source of income is off-farm work) had the greatest number of significant differences from the full-time farmer. Among these were greater likelihood of having completed high school, but lesser likelihood of using efficient or successful farming methods.

- 369 THE DEVELOPMENT OF A MODEL DESIGN TO ASSESS INSTRUCTION IN FARM MANAGEMENT IN TERMS OF ECONOMIC RETURNS AND THE UNDERSTANDING OF ECONOMIC PRINCIPLES. Rolloff, John August. Ohio State Univ., 6/-6364, MF \$3.00, HC \$7.80, 155p., 66.

The records of 27 farm operators participating in farm business analysis programs in 5 Ohio schools were studied to develop and test a model for determining the influence of the farm business analysis phase of vocational agriculture instruction in farm management. Economic returns were measured as ratios between 1965 program inputs and outputs determined by change in net farm income between 1964 and 1965. Data collected included: (1) the relative change in understanding of profit maximizing economic principles indicated by the change in test scores, (2) the change in farm income indicated by selected economic efficiency factors, (3) the association between understanding of principles and the economic efficiency of farm operators, and (4) the ratio between input cost of instruction and economic returns expressed as net farm income. In pilot trial the test group showed: (1) an improved mean change in test scores, (2) increased volume and economic efficiency in the farm business, (3) a positive association between farm operators' understanding of profit maximizing economic principles and changes in their economic efficiency, and (4) a \$53.16 increase in net farm income for each \$1.00 expended by farmers on instruction. Refinement of the model procedure was projected as a means of advancing inquiry into the micro-economic assessment of investments in agricultural education.

- 370 INPUT-OUTPUT RELATIONSHIPS AMONG SELECTED INTELLECTUAL INVESTMENTS IN AGRICULTURE. Cvancara, Joseph George. Minnesota Univ., 65-7761, MF \$3.00, HC \$6.20, 127p., 64.

Research was undertaken to determine whether instruction in farm management influences production efficiency and cash income and to determine the cumulative or diminishing effects on increases in income when matched farm units are compared after one, two, and three years. Data were collected on two groups of Minnesota farm units. Group A (33 farm units) participated in the Minnesota farm management program in 1960, 1961, and 1962. Group B (33 farmers) received instruction only in 1962. There was significant evidence that farmers in Group A had higher farm incomes by at least \$500 than Group B farmers. The study further showed that: (1) Group B farms had the potential for increasing farm income; (2) improvement in income was subject to diminishing returns effect; and (3) there was an increase in income from year to year with the greatest increase in the second year.

- *371 CHANGE AGENTS AS PREDICTORS OF THE RATE OF FARM PRACTICE ADOPTION. Lutz, Arlen E. Nebraska Univ., Ed.D. thesis, 66.

A study was made to determine the extent to which professional and business people can accurately estimate rate of farm practice adoption of farmers they know. A random sample of 91 farmers in York County, Nebraska, was selected for the study. A 32-item farm practice scale was used to measure their adoption rate and 3 sets of subjective ratings were obtained from interviewers, farmers who self-rated themselves, and from 16 change agents in the county seat. Change agents rated 31.9 percent of the farmer sample exactly, 44 percent in adjacent categories, and 24.1 percent inaccurately. The most progressive farmers were best known and most accurately rated. Greater commonality of rating existed between interviewers and objective ratings than with the change agent or self-ratings. All 3 subjective ratings had a higher relationship to each other than to the objective method. All 3 accurately rated those above average and overrated those below average in adopting new ideas. Rating ability varied considerably among change agents. Higher scoring agents were younger, had higher Quick-word scores, had less experience, and had lived less time in York. The nonsignificant factors were job tenure, social and census class, marital status, years and kind of education, education efficacy, and job-role statements.

- *372 A TIME-USE ANALYSIS OF THE AGRICULTURAL AGENTS IN NEW YORK STATE. Sharma, Jagdish Chandra. Cornell Univ., 64-1011, MF \$3.15, HC \$11.05, 241p., 63.

This study compared time use among a sample of agricultural agents in 56 New York State counties in 1950 and 1960. Data were obtained on 12 Extension teaching activities, 29 areas of work, and 59 farming and population variables, together with head agents' opinions on ideal future time use. The principal conditional change was the rise in the proportion of nonfarm rural dwellers. Important increases were noted in livestock and crop enterprises catering to the needs of nonfarm population; time devoted to community, public, home, and family affairs; development and conservation of natural resources; the number of telephone calls, radio broadcasts, and Extension organization meetings; and urban and rural nonfarm families influenced by agricultural agents. Findings showed that: population changes influenced types of farming, which in turn influenced Extension program planning; homeowners were becoming increasingly important as clientele; and home grounds and public relations were practical areas of work demanding more attention.

- *373 PARTICIPATION IN PESTICIDE EDUCATION PROGRAMS AND CHANGES IN OPINION LEADERSHIP ACTIVITIES. Looby, Lawrence Eugene. Nebraska Univ., 68-749, MF \$3.00, HC \$6.20, 127p., 67.

The matter of primary concern in this study was the effect upon opinion leadership activities of an educational program designed to increase personal influence. Other objectives were to create in all citizens an awareness

of the benefits of proper use of chemical pesticides, and to increase the activities of dealers handling these products regarding the dissemination of information to their customers about safe and proper application. Educational programs provided during a 12-month period included workshops, classes, conferences, bulletins and brochures, and radio and television programs. The dealers were interviewed before and after the program. Data were collected from two groups, the experimental group and the control group of dealers who had participated in the Nebraska Pesticide Control Program. Participation in an educational program by dealers was examined in relation to the changes in levels of opinion leadership activities; and certain occupational and professional characteristics of the pesticide dealers were treated as being systematically related to the level of opinion leadership. Analysis of the information gathered revealed that there was no statistical evidence to conclude that there was any significant difference between the two groups.

- 374 THE COMPUTER AND LINEAR PROGRAMMING AS IMPORTANT INSTRUMENTS FOR DECISION MAKING ASSISTANCE FOR FARMERS. Harter, Walter George. Ohio State Univ., 68-8832, MF \$3.00, HC \$8.60, 196p., 67.

This was a study to determine: if individual linear programs could be made for a heterogeneous group of farmers with varied organizational problems; if extension agents could be trained to interview farmers and collect data sufficiently accurate for linear programming; and whether the results would be logical and acceptable to farm managers. Area extension agents in farm management received training in data collection, then selected and interviewed farmers who were assumed to have complete farm records, were planning changes, and would cooperate with the study. After a few farms had been programmed and the results reported, the farmers were presented with two or more solutions. The first (income over variable expenses) was based on the current farm organization; a modified matrix included one or more activities concerning special organizational questions asked by the farmers. Using these comparisons, farmers were in a strong position to make a decision. Findings on the value of linear programming, on agents as programmers and interviewer-counselors, and on the acceptance of programming by farmers tended to be affirmative.

- 375 THE EFFECTIVENESS OF VOCATIONAL AGRICULTURE IN BRINGING ABOUT THE APPLICATION OF SELECTED SOIL CONSERVATION PRACTICES IN SOUTHWEST LOUISIANA. Johnson, Glen D. Arkansas Univ., 67-8701, MF \$3.30, HC \$11.50, Ed.D. thesis, 255p., 67.

This study was to determine the effectiveness of instruction in vocational agriculture in bringing about the application of selected soil conservation practices. The major source of data was records on file in the Louisiana Soil Conservation Service offices. Information on 700 farmers who received 75% or more of their income from the farm and who were cooperating with the Soil Conservation Service during 1960 to 1964, was obtained. Farmers who had one, two, three, and four years

of adult education in vocational agriculture and no high school vocational agriculture established a greater number of conservation practices in three, five, six, and seven out of nine comparisons respectively than did farmers who had no adult or high school vocational agriculture. In no case did farmers without adult or high school vocational agriculture put a greater number of the selected practices into use than did the farmers who had one or more years of adult vocational agriculture and no high school agriculture. Farmers who had two, three, and four years of high school vocational agriculture incorporated a greater number of conservation practices than did farmers who had no adult or high school vocational agriculture.

- 376 AN ANALYSIS OF TRAINING NEEDS AND EMPLOYMENT CHARACTERISTICS OF THE GREENHOUSE GROWER IN THREE METROPOLITAN AREAS. Parsons, Warren. Michigan State Univ., 66-14,162, MF \$3.00, HC \$6.40, Ed.D. thesis, 134p., 66.

This study aimed at determining training needed for the commercial greenhouse grower and securing employment information on greenhouse workers. A personal interview was conducted with managers of 58 large greenhouses in Chicago, Cleveland, and Detroit. Data were analyzed by: tabulating species of flowering plants grown in pots, as cut flowers, and in flats; the training of the grower desired by managers; and employment information. The first area of training (plant knowledge) included knowledge of plant parts, growth processes and plant names. The second area (operational abilities) included watering, controlling pests, fertilizing, potting, transplanting, operating equipment, etc. Analysis of production knowledge of labor, understanding insurance, managing money, buying and selling, and marketing were considered essential by many. Of mechanical activities growers perform, many managers felt skill in welding, wiring, construction, wood-working, and plumbing were essential. Of jobs in commercial greenhouses, the greatest number of opportunities were in that of grower helper; the one reported to offer greatest opportunity for advancement from this occupation was that of grower.

- 377 THE EDUCATION OF ORNAMENTAL HORTICULTURE TECHNICIANS IN OHIO. White, Robert Henry. Ohio State Univ., 67-16,348, MF \$4.05, HC \$14.20, 315p., 67.

A study was conducted in Ohio to determine job opportunities for ornamental horticulture technicians and to propose educational programs for them. A 58% usable response to a questionnaire sent to 481 firms and individuals was received; the population was validated as typical by telephone survey; and the number of needed technicians was projected on the basis of the total population. A study of educational programs outside Ohio identified six types: arboriculture and park management, floriculture, greenhouse and nursery, landscape, turf, and general ornamental horticulture. Of an estimated 807 ornamental horticultural technicians in Ohio during 1966, the greatest number were in landscape; location of firms generally corresponded to the distribution of popula-

tion. Based on patterns in other programs, on requirements of the State Department of Education and the State Board of Regents, and on recommendations of a jury of experts, 16 programs were proposed. Of these, six were in landscape. Curricula designed for 21 months duration at the post high school level and including 4 1/2 months of supervised work experience, were developed for these.

- 378 COMPARISON OF CERTAIN ABILITIES NEEDED BY WORKERS IN LICENSED NURSERIES AND LICENSED ORNAMENTAL HORTICULTURAL BUSINESSES. Dillon, Roy Dean. Illinois Univ., 65-7090, MF \$3.40, HC \$11.95, Ed.D. thesis, 262p., 65.

The study was to determine whether separate and specialized agricultural courses were needed for workers in nurseries and ornamental horticultural businesses, as well as in each of the primary job titles in both: general director, salesman, supervisor, and field worker. Involved were: the development of a questionnaire containing 100 items of knowledge in agriculture in four areas (horticulture, agricultural chemicals, floriculture, and soils); the interviewing of 160 head-workers under the four job titles from random samples of 20 licensed grower nurseries and of 20 licensed horticultural retail and landscaping businesses. The investigator concluded that, in knowledge of agriculture, general directors needed the following number of items in the listed areas: 84 in licensed nurseries and ornamental horticultural businesses, six in licensed nurseries, and two in licensed ornamental horticultural businesses. Eight were identified as not needed in either of the groups. Salesmen identified, as needed, 76 items in licensed nurseries and ornamental horticultural businesses, five in licensed ornamental horticultural businesses, and eleven as not needed by either of the groups. Supervisors identified 57 in both groups, 16 in nurseries, 6 in ornamental horticulture, and 21 as not needed in either group. Field workers made similar identifications.

- 379 FACTORS ASSOCIATED WITH SUCCESS OF ADULT EDUCATION IN VOCATIONAL AGRICULTURE IN ARKANSAS. Flood, Riefford Brown. Arkansas Univ., 64-10,062, MF \$3.05, HC \$10.60, Ed.D. thesis, 233p., 64.

This study investigated factors associated with success in adult farmer education in Arkansas. Involved were selected aspects of 545 adult farmer courses conducted for 7,652 farmers by 260 white teachers of vocational agriculture during 1961-62, the factors and teachers' opinions thereon, and the formulation of guidelines for further program development. These were some of the findings: (1) teachers based courses of study on eight subject areas; (2) average attendance was 79%; (3) about 2/3 of classes ran six months; (4) 92% of farmers enrolled planned to improve farm practices as a result of instruction; (5) sustained attendance and the average number of improved farming practices planned by enrollees were assumed to be adequate criteria of class success; (6) factors in attendance included type of class, time of day, frequency of meetings, class organization, location, teaching methods, class members' educational levels and farming status,

number of home visits per member enrolled, teacher tenure and salary, and ages of class members; (7) factors in adoption of practices included time of day, class organization, location, teacher tenure, daily class periods per teacher, and members' ages, education, and farming status.

- *380 THE NEED FOR CONTENT IN HOME DEMONSTRATION PROGRAMS AS INDICATED BY CLUB MEMBERS IN THE STATE OF OKLAHOMA. - Spivey, Grace L. Cornell Univ., 64-1046, MF \$3.50, HC \$12.15, Ed.D. thesis, 269p., 63.

The need for subject matter content in home and family living, and its relation to certain socioeconomic characteristics of club members were studied. Data were obtained from 253 respondents by mailed questionnaire. Findings indicated that among members a wide range existed in age, education, income, and place of residence. There was need for all subjects, but intensity of need differed. Older members had a need for clothing instruction, those with incomes under \$2500 for food and nutrition, \$2500-\$4999 for clothing, \$5000-\$7499 for housing, and \$7500 and over for human relations programs. Rural residents desired programs dealing with housing, while urban residents had a need for food and nutrition programs. Other participant characteristics such as home ownership, marital status, and employment were also noted. Generalized conclusions included: (1) club members tend to be housewives who own their own home and are middle-aged; (2) a significant relationship exists among the socioeconomic characteristics of age, education, and income, and expressed needs; and (3) the relatively low-level intensity of expressed need for the Home Demonstration Program suggests a need for reexamination of the total program.

- *381 WHY ILLINOIS WOMEN PARTICIPATE IN HOME ECONOMICS EXTENSION CLUB PROGRAMS. Hall, Cleo A. Chicago Univ., 207p., 65.

Home economics extension clubs were surveyed by a questionnaire to gather personal data, participant reasons for attending club meetings, and leader objectives. Returns from 741 members and 119 county extension home economists ranked 35 reasons, representing seven motivations--intellectual growth, improvement of society, improvement of homemaking competencies, sociability, diversion, and social expectations. No significant differences were found between motivations of club members and objectives of extension home economists; between highly satisfied club members, somewhat dissatisfied members, and home economists' selected objectives for attending meetings; and between primary motivation for attendance and selected demographic variables. Additional findings showed that home economists did not agree upon the relative importance of the three educative objectives--academic, community, or practical. It was concluded that the primary motivation for club attendance was to learn in order to improve homemaking competence, to grow intellectually, and to improve society.

- *382 FACTORS ASSOCIATED WITH KNOWLEDGE OF THE MISSOURI EXTENSION DIVISION HELD BY FRESHMAN AND SENIOR HOME ECONOMICS STUDENTS IN SIX MISSOURI COLLEGES AND UNIVERSITIES. Greenwood, Mary Nell. Wisconsin Univ., 65-569, MF \$3.10, HC \$10.30, 239p., 63.

This study investigated knowledge levels of 207 freshmen and 118 home economics students at the University of Missouri and five non-land-grant Missouri Colleges concerning the Missouri Extension Division, and identified helpful sources of information on career opportunities in home economics extension as well as in the general home economics field. Data came from interviews and questionnaires. Major findings included the following: (1) more college students received helpful career information on the general home economics field than on extension; (2) participation in extension activities and programs was a more important factor in receiving information on the extension career opportunities than was residence, type of institution, or major field of study; (3) individuals and organizations were the main source of helpful extension career information; (4) although most students had some knowledge of the Missouri Extension Division, they were better acquainted with program and organizational aspects than career opportunities; (5) rural residents and seniors attending land-grant institutions had a higher knowledge level than their opposite numbers.

See also: SECTION 2230 RURAL COMMUNITIES; 4625 YOUNG ADULTS (4-H); 7000 HOME, FAMILY, PARENT EDUCATION; 7600 COOPERATIVE EXTENSION; Item 21 participation and openness to new ideas; 208 educational, occupational plans of Wisconsin youth; 202 progression in 4-H programs at grades one, six, nine; 196 administrative involvement of state home economics leader; 128 closed circuit TV techniques in vocational agriculture; 127 television in horticulture education; 49 use of dairy planning committees; 61 method for predicting consequences of intra-organizational action; 66 learning orientations in extension clientele; 111, 109 evaluation of "in-depth" teaching and short course

6780 FOREIGN

- *383 PERCEPTIONS OF EXTENSION WORK IN MEXICO. Chena-Gonzalez Rodolfo. Cornell Univ., 64-1040, MF \$2.95, HC \$10.35, 63.

The study explored basic patterns of perceptions among professional agricultural workers in Mexico about the importance of possible new objectives, kinds of possible new objectives, kinds of functions, and types of training for its extension agents. Data were collected from 147 extension agents and supervisors, experimentalists, research leaders, and professors, by a mailed questionnaire. The three independent sections on objectives, functions, and training were rated and ranked. The findings indicated that different groups agreed that the specific objective of the extension service should be to concentrate on promoting a higher production of basic food crops. They disagreed about functions and training needs of extension agents. The agents had more realistic ideas of developing community services, such as the need for more direct financial aid to farmers, and development of pro-

duction facilities at the local level, than perceived by research and teaching personnel. It was concluded that the dual task of defining more precise role and training needs of extension agents requires research planned cooperatively by teaching, research, and extension institutions in Mexico.

- *384 A COMPARATIVE ANALYSIS OF HIGHER EDUCATION IN AGRICULTURE AND A PROPOSED PLAN FOR FURTHER DEVELOPING THE SYSTEM IN ETHIOPIA. Belay, Haile Selassie. Cornell Univ., 64-13,769, MF \$3.45, HC \$12.15, 266p., 64.

Using official sources and questionnaire responses, a study was made of higher education in agriculture in Ethiopia, France, Great Britain, India, West Germany, and the United States; and program proposals for Ethiopia were made. Except in Britain, agricultural institutes were government controlled but with widely varying autonomy and academic freedom. All but India and Germany provided many scholarships and had no placement problems. Organized research and extension services were public programs under national and/or provincial government agencies. Farmers were not represented in the organization of extension services in Ethiopia. Except in the United States, lack of coordination between research and teaching was a major problem. Proposals dealt with such matters as government financial responsibility, faculty authority and responsibility, academic freedom, staff selection and promotion by merit, teaching loads and student-teacher ratios, the phasing-in of personnel, special facilities and services, admission requirements, and the integration of teaching, research, and extension under a single authority.

- *385 FACTORS INFLUENCING THE PLANNING AND IMPLEMENTATION OF AGRICULTURAL PROGRAMS AS PERCEIVED BY NIGERIAN EXTENSION ADMINISTRATORS. Janelid, Ingrid Naemi. Wisconsin Univ., 66-13,418, MF \$3.00, HC \$9.90, 217p., 66.

This study in the eastern and western regions of Nigeria was designed (1) to analyze extension administrators' perceptions of the application of selected planning principles in the ideal and actual situation, and of sociocultural influences on program planning and implementation; and (2) to suggest ways of improving program planning and implementation. Interviews, a questionnaire, and statistical coefficients were used. Within regions and administrator categories, consensus was low on the application of principles. Some agreement was indicated on individual planning principles (scope and objectives, planning and organization, agricultural investment). The two regions differed on perceptions as to which factors were most favorable, but consensus was high on factors (family values, ecological and demographic factors) seen as unfavorable to the extension program. A number of the administrators had a relatively short experience in their present positions; and training in extension methods and social sciences was generally slight. The main conclusions included a lack of congruency between

organizational goals and program implementation, relatively high consensus on obstacles and stimulants to change, and a felt need to improve the quality of extension education in Nigeria.

- *386 APPLICATION AND ANALYSIS OF AMERICAN CROP PRODUCTION CONCEPTS ON STATE FARMS IN YUGOSLAVIA. Fanning, Paul Kenneth. Cornell Univ., 65-12,397, MF \$3.00, HC \$7.60, Ed.D. thesis, 161p., 65.

The basic problem studied was the unknown reasons for low and inefficient agricultural production on the mechanized socialistic farms in Yugoslavia. The focal point of the data collection was day-to-day recorded experiences of the author as manager of specific mechanized corn and sugar beet crop production fields. Helping the Yugoslavs solve a plowing problem without resorting entirely to American practices seemed to gain the greatest rapport of any success during the two years of the study. Conclusions relating to the study were: American crop production concepts were profitably adapted to Yugoslav conditions; results of teaching Yugoslavs improved production practices under representative field conditions showed productivity increases of up to 500% over domestic practices; these results showed realistic crop production potentials; there were forces stronger than was assumed at the beginning of this study being exerted for accelerated crop production; and development of the skills and knowledge needed at the operational and managerial levels in the use of modern farming methods was the greatest handicap to agricultural production development.

- *387 ASPECTS OF RURAL LIFE IN NORTHERN NIGERIA WITH IMPLICATIONS FOR AGRICULTURAL EXTENSION WORK. Gill, Dhara Singh. Cornell Univ., 64-81111, MF \$3.30, HC \$11.70, 256p., 64.

Research on rural life in Northern Nigeria was carried out through interviews with a stratified random sample of farmers in a district of Zaria Province. Among the findings were: roadside villages were more susceptible to accepting the use of fertilizer and other innovative agricultural practices than more remote settlements; women held different agricultural roles in pagan than in non-pagan areas, but in both cases they could best be reached by women extension workers; family structure dictated who were the decision makers within the family; literate farmers bought educational materials, and many people listened to agricultural radio programs; adopters of new agricultural practices were educated, bought books, listened to the radio, and had better contacts with extension workers than non-adopters. The findings suggest several bases for improving the effectiveness of extension education.

- 388 A BASIS FOR DEVELOPING PROGRAMS OF ADULT FARMER EDUCATION IN INDIA. Hanumanthappa, Sanjeevappa Hanumanthappa. Minnesota Univ., 66-12,205, MF \$3.00, HC \$9.90, 220p., 66.

Adult farmer educational programs in Midwestern community schools were studied to provide data to support the proposal of adult farmer education programs through community development work in India. Data were collected by mailed questionnaires from 31 supervisors, and 38 teacher trainers in vocational agricultural education in seven Midwestern states. Respondents were asked to give opinion on 14 principles and objectives of the programs which included the concepts of: application of available resources toward efficient farm management and production; on the farm instruction; aid in evaluation of farm resources and farm planning; provisions of skills to conduct analysis of business; minimum of bachelors degree for instructors; individual counseling and advice; awareness of public policies affecting agriculture; and counseling and special help for those living at a subsistence level. Data were analyzed and the chi-square test used for testing the hypothesis. No differences were found between the two groups of educators, with nine principles being strongly agreed upon. A program of adult farmer education was proposed and procedures for its implementation in India suggested.

- *389 COMMUNICATION BEHAVIOR OF VILLAGE LEVEL WORKERS IN SURAT AND MEHSANA DISTRICTS, GUJARAT, INDIA. Patel, Ishwarlal Chaturdas. Cornell Univ., 67-12,626, MF \$3.55, HC \$12.40, 274p., 67.

This study investigated communication patterns, procedures, and background characteristics associated with effectiveness in village level workers (VLWs) in two districts of Gujarat, India. Questionnaire interviews were held with 222 VLWs who had induced farmers to adopt one or more farm practices. An appraisal form was used to measure the effectiveness of communication channels. Effectiveness scores were used to classify VLWs into three effectiveness groups. Findings included the following: (1) respondents considered block (subdistrict) specialists the most important means of information dissemination; (2) VLWs generally used individual and group meetings more effectively than mass media, demonstrations, or farmer training camps; (3) farm and home visits were the means most used to disseminate information about improved practices; (4) many of the most effective VLWs were 24 to 35, sons of farmers, married, high school graduates with an agricultural diploma, and Extension trained, with under five years' experience outside Extension but over five years in Extension. It was concluded that the more personal the form of communication, the more impact it had in bringing about adoption.

- *390 ANALYSIS OF THE ROLE OF THE MERIDI EXTENSION UNIT IN THE SOCIOECONOMIC DEVELOPMENT OF PRIMITIVE TRIBAL SOCIETIES IN SOUTHERN SUDAN. Noah, Salah Eldin. Wisconsin Univ., 64-10,284, MF \$3.90, HC \$13.75, 302p., 63.

Review of anthropological studies on the Azandi tribe and nomadic tribal groups in southern Sudan, and collection of information through interviews and participant observation, provided the basis for a study of the functioning of and changes in tribal social organization and culture. The study is an attempt to investigate to way in which im-

proved agricultural practices can be adapted to the traditional system of shifting cultivation, to raise the production of food crops as well as of newly introduced cash crops. In particular, it attempts to set forth certain concepts and methods which are needed to develop a general methodology for building up an effective agricultural extension service to meet the social and economic needs of the backward tribal societies in Sudan. Tribal social emergence and economic advance have three prerequisites: the proper social machinery and adequate social receiving apparatus; social mobility; and development of progressive tribal leadership.

- *391 ROLE OF INFORMATION SOURCES AND COMMUNICATION CHANNELS IN ADOPTION OF IMPROVED PRACTICES BY FARMERS IN M. P. STATE, INDIA. Sharma, Devendra Kumar. Cornell Univ., 67-16,368, MF \$3.45, HC \$11.95, 265p., 67.

A study was made of information sources and channels whereby new ideas about improved farming methods are communicated to farmers. Questionnaire interviews were held with 200 farmers in Madhya Pradesh, India. Of the five information sources studied, neighbors were named by all respondents, village level workers by 72%, chairmen of village panchayats by 26%, and agricultural and university extension personnel by 20% and 17%, respectively. Among seven means of communication, demonstrations led with 50%, followed by radio (38%), audiovisual aids (posters, films, exhibits), general meetings, and reading materials. Age, education, caste, and economic status were discriminating factors, singly or in combination, in the use of all sources except neighbors and village local workers. One major finding was that face-to-face contacts between extension agents and farmers had the greatest, and mass media the least influence on adoption.

See also: SECTION 5280 LITERACY EDUCATION - FOREIGN; 5550 COMMUNITY DEVELOPMENT PROGRAMS - FOREIGN: Item 161 administrative problems in AID and other technical assistance; 131 radio forum in Ghana; 162 training needs of Nigerian extension agents; 160 extension education in Syria; 295 extension education in Iran; 113 demonstration method with farmers in Lebanon

6850 OTHER OCCUPATIONS

- *392 THE ADULT EDUCATION PROGRAM OF THE UAW LOCAL 412 TECHNICAL TRAINING CENTER. Zook, Jack Frederick. Michigan State Univ., 66-6184, MF \$3.00, HC \$5.40, 108p., 65.

The background, history, curriculum, and participants involved in the United Auto Workers Local 412 (UAW) Technical Training Center in Detroit are examined. The program was initiated by the local union, composed of the Amalgamated Engineers, Technicians, and Associates in the engineering division of Chrysler Corporation, to help re-employ union members displaced by automation. It was designed to develop skills in clay modeling, graphic illustrating, and product detailing, identified as areas of demand in the Detroit market. Through the Manpower Devel-

opment and Training Act, aid was obtained in selection of trainees, training costs, and job placement. Staff and students evaluated the training program prior to its completion and three months after completion. Conclusions delineate strengths and weaknesses, and include; the selection process was effective as there was a low dropout rate except for product detailing students; a more realistic consideration of individual circumstances (age, seniority, wages, marital status), would aid successful placement; training was considered to have little relationship to new positions; the UAW did not appear to have been too influential in placement of program graduates; and placement may have been more successful if the program had complete cooperation from industry.

- 393 AN EVALUATION OF A TRAINING PROGRAM IN INDUSTRY. White, Stroller Tod. Minnesota Univ., 67-14,666, MF \$3.00, HC \$7.00, 149p., 67.

This study investigated the extent to which the Analytic Trouble Shooting Program (ATS) trained troubleshooters in an automobile assembly plant: to use information about a problem to determine the cause of that problem and to anticipate and prevent problems. Troubleshooters in two specific departments were general foremen, foremen, process engineers, industrial engineers, quality control supervisors, and certain skilled tradesmen (mainly electricians). Forty experimental and 40 control subjects were used. Course content learning was evaluated by a multiple-choice test and by trouble-shooting reports of trainees who had used ATS on the job. The trainees significantly outscored the controls in using ATS to gather information about a problem; however, they were not rated significantly higher than the controls in using information to identify the causes of trouble. Relative to the controls, the trained group had improved on operating efficiency; but the change could not be confidently attributed to ATS training. (Reasons for the inconclusive outcome were suggested.)

6900 LIBERAL EDUCATION

- *394 THE RATIONALE FOR LIBERAL ADULT EDUCATION IN A FREE SOCIETY: A SURVEY ANALYSIS AND CRITIQUE OF THE LITERATURE FROM 1919 to 1961. Cotton, Webster Elliot. California Univ., 63-6587, MF \$4.65, HC \$16.45, Ed.D. thesis, 362p., 63.

A comparative analysis of the rationales for liberal adult education in a free society focuses on: (1) the marginality of most rationales with respect to the statement in which they appear; (2) the diversity of rationales with respect to whether the need for adult education is perceived as important or crucial, whether an empirical or normative-rational type argument is used, and whether the rationale is addressed to a limited or national audience; and (3) the polarization of most rationales around a professional or social reformist orientation. A critique of the literature (1919-1961) is made in terms of the failure of rationales (1) to make explicit their value orientation, (2) to contain a thoughtful and stimulating intellectual content, and (3) to

be developed in a systematic and incisive manner. This critique is then applied to three recent statements--the recognition that a problematic situation does exist, the recognition of the critical role of the individual in developing a viable rationale for adult education, and the recognition of the need for more intellectually significant rationales. The concluding chapter sets forth a rationale for liberal adult education in a free society.

- 395 THE AMERICAN LYCEUM. Stoddard, Paul Wakelee. Yale Univ., 67-2,980, MF \$3.80, HC \$13.30, 295p., 67.

This is a historical study of the great lecture movement which played an important part in United States history, particularly in New England, around the period 1825-1850. Chapter 1 includes a discussion of the ancestors of the lyceum in the United States and abroad. Chapter 2 relates the history of Josiah Holbrook, founder of the lyceum movement. Chapter 3 summarizes the history of three of the major local lyceums, and describes the role of lyceum lectures in the life of a New England town. Chapter 4 deals with the rather weak county, state, and national lyceums, with emphasis on the decade from 1830 to 1840. Chapters 5 and 6 stress the lyceum lecturing career of Ralph Waldo Emerson from 1835 to 1872, together with the lecturing activities of 12 other personalities in the lyceum movement. Chapter 7 discusses the auxiliaries of the lyceum, especially the pamphlets and magazines, as well as the so-called lyceum villages. Chapter 8 touches on descendants of the lyceum, notably the Chautauqua movement and modern lecture courses.

- *396 THE GREAT BOOKS MOVEMENT. Moorehead, Hugh S. Chicago Univ., 777p., 63.

This study documents the history of the Great Books movement in America and traces and analyzes the ideas, activities, and forces that gave rise to it. Included are: four precursors of the Great Books movement; four contributing developments (The Liberal College, Amherst; The Experimental College, Wisconsin; The School of Social Studies, San Francisco; The Washington, D.C. Public Library); the background of the idea; the birth of the idea; The Great Books foundation; and some facets of the Foundation's operations. Great Books brought books back into repute, educationally and culturally. Identified with "general education," it tended to focus attention on the need to examine the means and ends of American education during the second quarter of this century. As an educational program it accentuated the use of the discussion method and its adult dimension, emphasized the feasibility of involving laymen in the role of discussion leaders, and helped underscore both the reality of adult education and the value of the seminal works of the past. (Appendixes have lists of books published as classics of the Western World.)

- *397 A STUDY OF LIBERAL ADULT EDUCATION DISCUSSION GROUPS IN WYOMING. Neff, Monroe C. University of Wyoming, Ed.D. thesis, 146p., 54.

A study was made of liberal adult education discussion groups in Wyoming and the results compared with a national study of groups in urban areas (Kaplan, 1960). The survey instrument was mailed to 228 discussion group participants who were enrolled in programs during 1962-63, of which 211 questionnaires were returned and 208 were used. Thirty-three of the 48 questions were compared to the Kaplan study. A chi square test was used on 30 of the comparative questions. The remaining 15 questions were designed to have implications primarily for Wyoming. Comparison of the data with the Kaplan study showed that major attitudinal and organizational differences existed between urban and rural liberal adult education discussion group participants and should be taken into account in program design. This variance reflected the difference in rural-urban sociocultural patterns. A survey of state legislative action to support liberal adult education encompassing the group discussion method revealed that 10 of the 18 states that had appropriations for general adult education aided adult discussion groups.

- 398 A CRITICAL STUDY OF THE CONTINUING ADULT STUDENT BODY AT THE OKLAHOMA CENTER FOR CONTINUING EDUCATION IN PROGRAMS OF LIBERAL EDUCATION. Ford, James Harlan. Oklahoma Univ., 66-10,172, MF \$3.00, HC \$5.20, 102p., 66.

This study sought to identify the adult student body in liberal education at the Oklahoma Center for Continuing Education, to describe student characteristics and participation, and to learn if there was a participation relationship between liberal education programs and vocationally oriented programs at the Center. As determined from enrollment records, a majority of participants were middle-aged, managerial or professional personnel or housewives, above average in education, and residing in urban communities. When encouraged to do so, husbands and wives participated together. No common point of entry or sequential pattern of participation could be found. Extent of participation appeared related to persistence of programing. There was also some cross-program recruitment between the two types of programs. Moreover, the percentage of participation before and after middle age, and the extent of participation by clerical workers and rural dwellers, seemed to warrant further research with these groups as potential audiences.

- *399 THE CASE STUDY REFORM MOVEMENT IN AMERICAN CIVIC EDUCATION: EDUCATIONAL IMPLICATIONS OF POLITICAL APATHY. Winn, Ira Jay. California Univ., 66-7138, MF \$3.95, HC \$13.75, Ed.D. thesis, 305p., 66.

A theoretical and practical rationale for implementation of a case study-directed reform of American civic education is developed with particular attention to constitutional rights. Questionnaires, interviews, observations, and a literature survey provided material. Advantages and limitations of the case method are discussed and a practical guide for teachers is developed. A survey of high school seniors found

that the same misunderstanding of constitutional rights is shown as in other voter surveys; the educational system fails to arouse interest or give understanding of the operational meaning of democracy; and political apathy and ignorance have roots in the present system of civic education. The lack of national political dialogue and societal pressures toward conformity are adversely affecting American civic education. The development of a case study method would enable students to organize fragmented facts and materials while facing and working out a solution to problems in a more personal frame of reference. (The appendixes include examples of case studies, procedures for implementing case study in classroom civic education, and a workshop schedule and bibliography.)

- 399a THE DEVELOPMENT, APPLICATION, AND APPRAISAL OF AN INDUSTRIAL EDUCATION PROGRAM. Quinton, John Damon. Houston Univ., 65-9907, MF \$4.70, HC \$16.65, Ed.D. thesis, 367p., 65.

This study traced the development, application, and evaluation of an experimental program of general industrial education and sought to illustrate the feasibility of training personnel to conduct "industrial teaching." About 5,000 employees of an oil and gas company met in groups of 10 to 35 for three group discussion sessions on practical politics. They filled out questionnaires before and after the program, and informal interviews were held with a few. These were among the findings: (1) discussion leaders received high praise for their handling of meetings; (2) employees felt that discussions were frank and that the meetings benefited them and the company; (3) booklets and other handouts were considered worthwhile but seemed to have less appeal than discussions; (4) employees showed large knowledge gains on key issues covered in the discussions; (5) employees agreed strongly with principles of free enterprise and were generally more conservative than the general public on issues of big government and welfare; (6) age, tenure, sex, and manual or white collar occupational status influenced employees' opinions and affected understanding and retention.

- 400 THE PROBLEMS OF PEACE: A MANUAL DESIGNED FOR GROUP DISCUSSION, INCLUDING A PRELIMINARY PROGRAM OF EVALUATION. Woock, Roger R. New York Univ., 65-6611, MF \$5.35, HC \$18.90, Ed.D. thesis, 418p., 64.

A discussion manual on the problems of attaining world peace was prepared by drawing together a collection of related reading materials. Readings were selected on the basis of five criteria: readability, accuracy and consistency, reputation of the author, timeliness, and the representative nature of the article. The five sections of the manual are: National Purpose, Power, and World Peace; Religion, Morality and World Peace; Personality, Society, and World Peace; Arms Control, Disarmament and World Peace, and the United Nations, World Order, and World Peace. Evaluations of the manual were solicited from representatives of 15 organizations in related fields, and the responses were overwhelmingly favorable. The manual is intended for use in home

discussion groups, classes in adult divisions of public school systems, and other adult education programs.

- *401 ISSUES IN PUBLIC EDUCATION, WITH SPECIFIC REFERENCE TO WORCESTER COUNTY, MASSACHUSETTS. Weeks, Shirley Smith. Wisconsin Univ., 64-12,763, MF \$5.15, HC \$18.25, 404p., 64.

Objectives of this study included describing possible socioeconomic and educational environmental influences on attitudes in Worcester County, Massachusetts, toward major public education issues; analyzing variance in perceptions of school committee members and volunteer Extension leaders as to issues; and making adult education program recommendations. A total of 410 respondents were asked to state which of 83 issues were, and which should be, important in their school districts. Findings included the following: (1) a majority agreed on the current or deserved importance of building needs, finance, teacher employment, teacher qualifications and ability, parent involvement, and several high school related issues; (2) Extension leaders and school committee members differed as to the current importance of 18 issues and deserved importance of 21 issues; (3) differences in sex, age, and education were significant for 12, 41, and 32 issues, respectively; (4) differences between school committee members and Extension leaders on specific issues were a function of education and leadership position; (5) differences within respondent groups were a function of age and education; (6) patterns of response were related to nine out of 13 selected personal variables.

- 402 AN INITIAL INVESTIGATION OF THE WOOD READING DYNAMICS METHOD. Liddle, William. Delaware Univ., 66-5559, MF \$3.05, HC \$10.80, 236p., 65.

This study investigated whether the Wood Reading Dynamics Method could produce reading speeds three to ten times normal without reducing comprehension. Fifty University of Delaware students were randomly divided into an experimental group, who received 32 hours of instruction by the Wood Method over a 12 week period, and a control group. The reading rate was defined as the number of words claimed read, divided by time spent, and comprehension as the number of "Fact," "Inference," and "Critical Reflection" items answered correctly on an untimed test. Findings tended to substantiate the claims made for the Wood Reading Dynamics Methods in rate, but showed increases for the experimental group on only one aspect (total nonfiction comprehension) of comprehension.

- *403 A STUDY OF CHANGES IN ART ATTITUDES AND GRAPHIC EXPRESSION AMONG THE RETIRED: AN EXPERIMENTAL PROGRAM IN ART EDUCATION. Sanders, William Harold. Indiana Univ., 66-3131, MF \$3.00, HC \$7.40, Ed.D. thesis, 158p., 65.

This study was to determine the extent to which a program of selected art experiences could cause a positive change of attitude toward art,

artists, and art and the self; a positive change in graphic expression; and a change in participation and involvement. Fifteen retirees participated in a 10-day art program at the Franklin Methodist Home, Indiana. An attitude scale was administered at the first and last meetings of the hour and one-half long sessions. Two and one half months later a followup test was given. Statistical correlations were made on the three tests to determine whether significant "t" values had resulted. The participants' attitudes toward art did not change to any significant degree. Attitudes toward artists changed most significantly during the ten days then dropped slightly at the delayed posttest. Attitudes toward art and the self showed a slightly greater change during the ten days and increased to the .01 level of significance for the delayed posttest. The study of art as an area of learning appears to have little effect in changing attitudes toward art when discussion alone is used.

- *404 AN ANALYSIS AND EVALUATION OF PLANETARIUM PROGRAMMING AS IT RELATES TO THE SCIENCE EDUCATION OF ADULTS IN THE COMMUNITY. Moore, Maurice Gene. Michigan State Univ., 66-427, MF \$3.00, HC \$6.60, 137p., 65.

As an aid in program evaluation and planning, a study was made of differences between adults in Flint, Michigan, who attended planetarium programs and adults who did not. A sample of 107 enrollees in eight public school adult education classes responded to a 12-item inventory. Respondents were divided into two subgroups, which were compared on aspects of media participation, attitude differences, and vocabulary recognition. Adults not attending planetarium programs tended to read more books, and spent more time watching television and listening to radio, than attenders, but attended fewer movies and did not read newspapers as often. Although affected by such factors as age, adult attitudes toward space research expenditures were influenced even more by attendance at planetarium programs. Multiple exposure to programs significantly increased the number of words recognized from a specialized glossary of space terms.

- *405 FACTORS AFFECTING PARTICIPATION BY ADULTS IN COMMUNITY EDUCATIONAL ACTIVITIES CONCERNED WITH THE CULTURAL ARTS. Warlum, Michael Frank. Wisconsin Univ., 67-6844, MF \$3.00, HC \$7.20, 157p., 67.

The study seeks to determine and describe factors which are related to, and which may be responsible for, adult participation or lack of participation in a large-scale, community-wide, cultural arts project involving considerable volunteer effort. While serving as a participant observer, the researcher gathered data from sources directly related to a Finnish ethnic group festival. Project participants were ranked by a group of judges according to the degree of their involvement. The names of forty-five participants to be interviewed were chosen from the judges' list. Fifteen were ranked as high participants, 15 as medium, and 15 as low. The data included news articles and correspondence prepared in connection with work on the project, a daily journal and monthly reports compiled during this time, interviews carried on with project

participants and non-participants, and respondent check sheets dealing with several variables hypothesized as affecting participation. With one exception, the null hypotheses tested failed to be rejected. The rejected hypothesis, dealing with nationality, showed a significant difference. People of the ethnic group emphasized by the festival showed greater aptness to participate than people who were not of this ethnic group.

- *406 A STUDY OF MUSIC OFFERINGS IN THIRTY PUBLIC SCHOOL ADULT EDUCATION PROGRAMS IN THE UNITED STATES. Gerkowski, Ray. Michigan State Univ., 66-6125, MF \$3.00, HC \$7.00, 149p., 65.

This study was concerned with the nature, status, and extent of adult participation in local public school adult education music classes in 30 cities in the United States in the population range 150,000-250,000. Findings indicated that the objectives and content of the music classes were geared to the needs and interests of amateurs who had turned to music as a leisure-time activity as either listeners or participants. Classes were categorized as either voice or instrumental instruction, music appreciation, group participation in large or small ensembles or theory and fundamentals of music. Responses showed that music had a lower program priority than industrial training or adult basic education. No significant change was revealed between 1958 and 1963 in the number of classes offered in adult education programs; but adults showed increasing interest in voice or instrumental instruction, music appreciation, and ensemble work, and decreasing interest in theory and fundamentals. Adult education directors tended to favor two-hour classes, to schedule them on a weekly basis, to favor a 24-week school year, and to evaluate classes annually.

- 407 A SURVEY OF THE CULTURAL SERVICES PROVIDED BY THE COMMUNITY COLLEGES IN THE UNITED STATES. Hodson, George Abel. Washington State Univ., 65-1548, MF \$2.75, HC \$7.80, Ed.D. thesis, 167p., 64.

This 1963 study surveyed the extent and nature of community cultural services by community colleges in the United States, and ways in which community size, economic setting, and college size and age affected these services. Questionnaires mailed to 411 community colleges drew a 69% response. From the survey it was concluded that: (1) many community colleges consider cultural enrichment important; (2) major efforts were the presentation of art shows, plays, and concerts, and the provision of facilities for public use; (3) inclusion of the public as participants in college cultural activities was not widely practiced; (4) college cultural programs were affected more by community size than economic activity; (5) fine arts programs' financial and personnel problems decreased as population rose, but administrative and public relations problems did not; (6) community colleges with active community enrichment programs tended to have the fewest public relations problems; (7) financing was the chief problem for fine arts programs; (8) the greatest cultural enrichment efforts were generally made by colleges 10 to 50 years old and those with 301 to 4,000 students.

- 408 ADULT EXPERIENCE; A KEY TO CHRISTIAN DISCIPLESHIP: PUTTING IMMEDIACY AND EMOTIONAL CONTENT INTO A CHRISTIAN THEOLOGY SPECIFICALLY FOR ADULTS. Thede, Gaius Wendt. Pacific School of Religion, 66-4471, MF \$6.25, HC \$22.05, 490p., 65.

The first practical problem of a Christian educator in reaching inadequately committed adults is motivation. Although educational psychology shows very little that goes beyond self-realization or self-actualization as the basic motive of man, the Christian view of man makes it clear that God's own motivation, agape (self-giving love), is also meant for man and is the only possible adequate motivation. Philosophers like Polanyi now recognize the necessity of involvement for any knowledge. Religious knowledge, involving man more completely than any other kind, demands more complete commitment and greater personal risk, making decision more difficult. Decision and commitment are more likely if one's awareness and one's sense of involvement are increased. We propose a Christian "commitment theology" as the content of Christian adult education. Such a theology must deal with divine revelation, which is not propositional, but God's revelation of Himself in interpersonal relationships. Considerations suggest that we can approach adults on the basis, not of intellectual acuity, but of a "maturity" due to life lived; that the Christian educator's role is not as God-substitute but as bystanding "introducer;" and that the basic content can be "existential theology," centering on the Fatherhood of God.

- *409 PROTESTANT POLICY STATEMENTS AND PROGRAMS OF ADULT EDUCATION ABOUT PUBLIC EDUCATION. Fister, James Blaine. Columbia Univ., 66-2654, MF \$3.00, HC \$8.80, Ed.D. thesis, 193p., 65.

Objectives were: to determine to what extent major Protestant church bodies in the United States have adopted official policy statements supporting public education; to learn whether their adult work agencies have provided public education suggestions and programs for local groups; and to arouse awareness, and concern in the churches. Statements by 13 church bodies were analyzed; agencies in men's work, women's work, social action, adult education, and Christian education were surveyed. Respondents' opinions were sought as to critical issues in public education and what the churches should do about them. The policy statements showed strong support for public education, but responses as to provisions by adult work agencies for public education were largely negative. There were signs of intensive study in a few denominations on specialized aspects of public education. Leading issues were religion in the schools, curricular concerns, and meeting educational needs of pupils. Leading suggestions for action were to promote study of public education, participate in public education affairs, and improve church educational programs.

See also: Item 110 effects of training on hunters' views on conservation; 322 economic education for clergy; 340 role of liberal studies in vocational education; 496 museum education programs; 204 ethical values of young adults; 123 ETV as liberal education; 118 use of feature films in adult education; 114 traveling science demonstration; 70 methods in art education; 487 theological concepts in Lutheran adult curricula

6950 HEALTH AND MENTAL HEALTH

- *410 A HISTORICAL STUDY OF TRENDS IN THE METHODOLOGY AND CONTENT OF ADULT EDUCATION PROGRAMS IN NUTRITION IN THE UNITED STATES. Moore, Shirley Tuttle. Michigan State Univ., 66-6152, MF \$3.00, HC \$10.35, 226p., 65.

A history of adult education in nutrition provides a case study in adult education. A selected sample of active programs provided coverage for the period between 1894 and 1965. These programs were carried out by governmental, educational, professional, philanthropic, health, religious, and commercial agencies. In the period since 1894 nutritional knowledge has progressed from the recognition of four nutrients--protein, carbohydrate, fat, and ash--to a knowledge of approximately fifty nutrients essential to human nutrition. In the same period teaching attitudes have ranged from simple insistence that the public be told what it should eat to a recognition of the existence of those social, psychological, and emotional factors which create difficulty in changing food habits. At the turn of the century emphasis was on the cheapest food which would provide the largest amount of protein and energy. Later trends in content and methods of nutrition education programs for adults can be divided into three groups--those brought about by (1) level of scientific knowledge, (2) changes in physical structures and facilities, and (3) contemporary values, beliefs, and social conditions.

- *411 A STUDY OF TRAINING NEEDS OF MARCH OF DIMES WORKERS AND SUPPORTERS. Chappell, Carl L. Indiana Univ., 67-3656, MF \$3.00, HC \$8.80, 193p., 66.

A study was conducted in southern Indiana to determine the educational needs of the general public, solicitors, and organizers involved in the March of Dimes. Knowledge, attitudes, and skills required for more adequate support of the March were examined through a survey using an interview schedule. Major conclusions were that: members of the general public are not adequately educated for proper and adequate support of the National Foundation, March of Dimes; extensive and effective training programs must be conducted at the local level; and an extensive effort by persons at all levels is needed to confront the public with the new area of concern in birth defects. This doctoral dissertation is available from Indiana University, Bloomington, Indiana.

- *412 A STUDY OF SELECTED ASPECTS OF SECONDARY SCHOOL HEALTH PROGRAMS IN FIVE RURAL WISCONSIN COUNTIES. Whaley, Russell Francis. Wisconsin Univ., 64-10,332, MF \$3.30, HC \$11.50, 253p., 64.

This study aims at determining and appraising health services of selected rural schools in five Wisconsin counties considered as 100% rural; and appraising the effectiveness of four curriculum plans--incidental, direct, and two integrate--as they influence pupil health knowledge, interests, and practices. Eight schools were randomly selected from schools stratified by curriculum categories, and validated tests admin-

istered to samples of students attending them. Results show that school health services in the five rural counties fall below nationally recommended standards in most areas of health services studied. Pupils in schools with an incidental type curriculum for health instruction show a statistically significant higher mean score than pupils in schools with a direct type curriculum or an integrated (with a written plan for integration) type curriculum for health instruction. Pupils exposed to the direct plan for health instruction have a statistically significant lower mean score than pupils in schools with any of the other three types of curriculum.

- *413 ESTHER MIDDLEWOOD: ADULT EDUCATOR AND AMBASSADOR FOR MENTAL HEALTH. Hanks, John Warren. Michigan State Univ., 66-6130, MF \$3.00, HC \$9.90, 216p., 65.

This biographical study of the career of Esther Middlewood also includes a history and description of the Mental Health Education Section, Michigan State Department of Mental Health. Speeches, professional writings, special taped interviews, personal papers, time logs of professional activities, official reports, and correspondence were among the sources used. Miss Middlewood's life and career show the consistency of her personal, religious, and educational values as expressed in both her professional and nonprofessional activities. She has headed the Michigan mental health educational program since its inception in 1947, and has served as a secondary schoolteacher, counselor, and guidance director. Other activities and accomplishments include use and production of mental health films, and public awareness through pamphlets, articles, public addresses, and discussion leadership. The Michigan program is nationally known for teaching positive concepts to parents and other groups. An outstanding project has been the lay leadership training program in mental health education. An appendix surveys historical and sociological aspects to mental health education.

- *414 AN EXPERIMENTAL PUBLIC EDUCATION PROGRAM IN MENTAL HEALTH. Arnold, Hubert Merrell. Indiana Univ., 68-2259, MF \$3.00, HC \$6.20, 128p., 67.

This study was made of an experimental adult education program and its effect on the general public's knowledge of and attitudes toward mental illness and related concepts. The program was based on freedom of expression, active involvement, and voluntary participation. The 74 participants were divided into a control and an experimental group matched by socioeconomic status, vocation, education, and age. Experimental subjects took part in the educational program, a session a week for three weeks. The control group received no treatment. Both groups responded to specially constructed pretest and posttest measures of attitudes and knowledge. In this study, high knowledge levels were not related to positive attitudes, nor were low levels related to negative attitudes. The experimental program significantly increased knowledge levels without increasing positive attitudes.

- *415 KNOWLEDGE OF AND ATTITUDES TOWARD MENTAL ILLNESS AS HELD BY THREE POPULATIONS INVOLVED WITH MENTALLY ILL. Ackerman, Ora Ray. Indiana Univ., 64-5116, MF \$2.75, HC \$8.80, Ed.D. thesis, 194p., 63.

Relatives of hospitalized mental patients, neighbors living next door to patients at the time of hospitalization, and volunteers working in an Indiana State hospital were studied as to responses to potentially factual statements regarding mental health and attitudes toward mental health concepts and the mentally ill. The general public knew more about mental health factors than any of the three groups studied but all three had more positive attitudes. Relatives and neighbors differed little as to attitudes although neighbors seemed a little more knowledgeable on mental health factors. Similar groups of relatives and neighbors did not differ in knowledge. Among neighbors, the low education group (below grade 12) had more positive attitudes; among relatives, the high education group had more positive attitudes. Analyses within the three populations showed that better educated relatives and neighbors had more knowledge of mental health factors than those less educated. High and low education hospital volunteers did not differ in knowledge but those less educated had more positive attitudes.

See also: SECTION 5850 MEDICINE AND HEALTH (Continuing Professional Education); Item 326 training March of Dimes workers

7000 HOME, FAMILY, PARENT EDUCATION

- *416 PARTICIPATION OF YOUNG HOMEMAKERS IN GROUP LEARNING ACTIVITIES. Goble, Eva L. Chicago Univ., 129p., 64.

Young homemakers in group learning activities were studied in three types of communities--agricultural or farm, rural but increasingly non-farm, and industrialized. The instrument, which was developed for collecting the data and subjected to pilot testing, comprised direct questions, three projective pictures, and two projective stories. A personal interview technique was used. The young homemaker non-member viewed the club as a closed social group which took the initiative in selecting members. The young homemaker had not moved from an age-graded homogeneous group to an adult heterogeneous society and felt unsure of her role in this social context. Neither the young homemaker non-member nor member viewed group learning as an activity which was productive to her family. Both received negative influence with regard to participation in a learning group, from husband, mother figure, and contemporary. Members were older, had higher incomes and more education, and had been married longer, and fewer had children less than two years old. (The appendixes include: instrument used, data collected, and a bibliography.)

- 417 MULTIPLE EXTENSION PROGRAM PARTICIPATION AND THE USE OF HOME MANAGEMENT PRACTICES. Steele, Sara M. Wisconsin Univ., 63-7679, MF \$4.20, HC \$14.65, 325p., 63.

The study attempted to examine the influence of participation in extension programs, on the adoption of home management practices. The dependent variable was the mean number of 15 management practices used. These were considered important in managing time, energy or family business, and included such practices as: keeping home records, having a joint checking account, using a shopping list, and planning the day's work. Extension program participation was the major independent variable of the study. The data were collected through the interviewing of women who were farm homemakers, had been married at least five years, and were under fifty years of age. Thirteen Wisconsin counties were involved. The "t" test and tests of percentages were the statistical tools used. It was concluded that intensive involvement with the Wisconsin Extension Service was more highly related to the use of management practices than was any other variable included in the study.

- 418 AN INSTITUTIONAL APPROACH TO A STUDY OF COMMUNITY NEEDS WITH SPECIAL REFERENCE TO THE COMMUNITY COLLEGE. Davis, Alvin Russell. Texas Univ., 65-4284, MF \$2.75, HC \$8.80, Ed.D. thesis, 191p., 64.

A review of recent sociological literature on the family as a social institution was analyzed in an attempt to identify the social problems resulting from changes in the family. The five major problems delineated were old age, broken homes, juvenile delinquency, motivation, and housing. A synthesis of the sociological and educational literature was made to identify those needs of the family which appeared to have educational implications and to determine means by which the needs might be substantially reduced by the program of the community college. The findings of the study illustrate the effectiveness of attacking the social problems associated with the family through the community service program of community junior colleges.

- 419 EDUCATIONAL METHODS USED IN PRESENTING CONSUMER INFORMATION TO HOME-MAKERS LIVING IN LOW INCOME URBAN AREAS. Norris, Virginia. Ohio State Univ., 67-16,321, MF \$3.00, HC \$9.70, 214p., 67.

A study of low income homemakers attending consumer information educational meetings in St. Louis City, Missouri, was undertaken to determine the knowledge acquired in specified consumer education practices and to assess the applicability of educational methods in presenting consumer information. The schedule of 121 questions used by interviewers to gain responses from those in the ten percent sample was based on teaching objectives outlined by extension home economists on subject matter presented by leader aides, in classes, and through the mass media. Participants ranged from 18 to 78 years of age and 82 percent had not completed high school. The mean family size was 3.91. The median family income was \$3,590, chiefly from social security benefits. Homemakers adopting practices and acquiring subject matter knowledge were usually those with 9-11 years of formal education and incomes under \$2,000. It was recommended that educational programs be aimed at the low income urban homemaker who is under 40 years of age and has a family, and that her leadership abilities be utilized.

- *420 DIFFERENCES IN PERCEPTIONS OF NEEDS FOR NUTRITION EDUCATION AS SEEN BY HOMEMAKERS FROM DIFFERENT AGE GROUPS AND BY LAY AND PROFESSIONAL LEADERS. Czajkowski, Janina Mary. Boston Univ., 64-4045, MF \$2.90, HC \$10.15, Ed.D. thesis, 222p., 63.

A study was done in Connecticut on differences in perceptions of need for nutrition instruction as seen by homemakers from different age groups, and possible gaps between the homemakers' perceptions and those of their lay and professional Extension leaders. Data were obtained by an original, pretested rating scale. A positive correlation was found between homemakers' perceived educational needs and the development tasks of their age category. Some concerns of homemakers indicated inadequate mastery of developmental tasks during the preceding period. Lay leaders tended to judge the relative importance of homemakers' problems in terms of homemakers in their own age category. Professionals tended to judge problems by their inherent scientific importance; homemakers tended to judge in terms of their own situation. The professionals tended to see problems as more numerous and persistent than did the homemakers. Such problems as time and money were seen as persistent concerns by all three groups.

- *421 ROLE BEHAVIOR AND ATTITUDE CHANGE IN NURSERY SCHOOLS. Phelps, David Walton. California Univ., 65-8295, MF \$3.10, HC \$10.80, Ed.D. thesis, 240p., 65.

An attempt was made to clarify the following questions: To what degree do parents' perceptions of the teacher's role behavior change over an extended period of time? (2) To what degree are any changes in the parents' perception of the teacher's role behavior reflected in the parents' development of attitudes toward family life and child behavior? A sample of 20 mothers of four-year old nursery school children and 41 parents of two-year old nursery children was studied. The Interpersonal Role Behavior Percentage Inventory, and the Parental Attitude Research Instrument were the tools used to measure factors in parents' (1) perceptions of the teacher's role behavior, and (2) attitudes toward child growth and development. Each perceptual category was examined, by the Kruskal-Wallis One-Way Analysis of Variance, with respect to the degree of attitude change exhibited by each perceptual category. The major findings of this study included the following: (1) those who perceived the teacher's role as negative tended to have discongruent role expectations of the teacher; (2) adults perceiving the teacher positively appeared to be evaluating her on the basis of personal characteristics rather than expected role behavior; and (3) those adults who had little or nor perceptual change tended to exhibit some positive and negative characteristics. (A bibliography is included.)

- *422 A STUDY OF THE EFFECTS OF A PARENT EDUCATION PROGRAM ON THIRD GRADE ARITHMETIC ACHIEVEMENT LEVELS. Mayes, Thomas A. Michigan State Univ., 65-14,248, MF \$3.00, HC \$10.35, 226p., 65.

An attempt was made to measure the effectiveness of an experimental adult education project designed to help parents to supplement the individual attention children receive in their third year arithmetic classrooms. The project involved 139 families in four Flint elementary school neighborhoods during the 1962-63 school year. Kits containing instructions, games, and drills were sent to parents once a week for 30 weeks. Parents were invited to spend as much or as little time on the project as they chose. No materials were returned to the school and no grading was made on the work performed. Parents' performance was measured by comparing arithmetic means in Stanford Achievement test scores of children of the participating parents against those of children in the two previous third year classes in the same schools. Additional evaluation was made through a questionnaire distributed to parents. Interpretative data indicated achievement gains of eight months for one school, six months for two schools, and two months for the fourth school over their respective control groups. (The appendix includes copies of the Kuhlmann-Anderson test, the Stanford Achievement test, the letter sent to the parents, the experimental arithmetic program questionnaire, the take-home kit, and a bibliography.)

- 423 EFFECT OF THE Y-INDIAN GUIDE MOVEMENT AND GROUP DISCUSSION ON THE ATTITUDES THAT PARTICIPATING FATHERS HOLD TOWARD THEIR SONS. Heckman, Philip Richard. New York Univ., 63-6664, MF \$2.75, HC \$7.20, 154p., 63.

In the Young Men's Christian Association (YMCA), which has a national program for boys aged 6-8 and their fathers (Father and Son Y-Indian Guides), a study was done to learn how this YMCA program affects fathers' attitudes toward their sons, and to test the effectiveness of parent discussion groups under trained leadership. Three homogeneous populations (recent members, discussion group participants, and a control group) were tested with an attitude survey at the beginning and end of a nine month period. Four of the 18 survey subscales showed significant differences in attitudes, but one was suspect because of relatively high differences in initial scores. Thus, only three scales (Fostering Dependency, Intrusiveness, and General Child Rearing) showed significant changes for discussion group participants. It was concluded that the Father and Son Y-Indian Guide program does not significantly affect parental attitudes of fathers. Further study of the program's potentials and accomplishments is recommended.

See also: 6710 AGRICULTURE, HOME ECONOMICS: Item 97 participation training for parents and high school children; 179 teacher preparation and program planning in homemaking education; 132 radio drama in home education; 88 discussion method in fertility control program for working class Negro mothers; 180 role of professional leaders in parent education for disadvantaged; 112 effects of nutrition program

7050 ARTS, CRAFTS, RECREATION

- *424 THE RELATION OF RE-CREATION TO A THEORY OF EGO DEVELOPMENT. Colley, Louise Annie. Wisconsin Univ., 66-9133, MF \$3.00, HC \$9.70, 217p., 66.

This study explores the relationship of ego-stage development (based on the theories of Erik Erikson and roughly defined as psychological maturity) to experiences which a group of adults identified as leading to re-creation for them. The author believes that re-creation--defined as a feeling of heightened well-being or a sense of renewal and refreshment--is a basic human need and is usually a pleasant experience. Using data obtained from 73 women selected from women graduate students at the University of Wisconsin in the fall of 1964, information regarding re-creative experiences was obtained from a self-report diary sheet. Participants observed their own re-creative behavior on ten days. Measures of ego-stage development were obtained by means of a structured Q-sort based on Erikson's theory. Conclusions from the study include: (1) re-creation is usually gained when individuals regress to a lower stage of ego development; (2) mature individuals, however, tend to gain re-creation from experiences when they are in a positive, enthusiastic, creative frame of mind; (3) a re-creative experience tends to be essentially a synthesizing and unifying one. Implications from the study show that different preconditions of the person determine what kinds of experiences will have re-creative outcome, and that the ego-stage level determines re-creative needs.

- 425 PROJECTIONS FOR THE SELECTION, TRAINING AND RETENTION OF SUB-PROFESSIONAL RECREATION LEADERS BASED ON AN ANALYSIS OF PERSONALITY, INTEREST, APTITUDE, AND PREFERENCE DATA. Parker, Adah Donohue. Illinois Univ., 66-12,403, MF \$3.00, HC \$8.20, 179p., 66.

Data gathered by a survey of recreation technicians from various parts of the country were used to study the role of the sub-professional recreation leader in order to suggest a job analysis and minimum qualifications for the position and to provide background data for suggesting techniques of selection and a training program. Data were analyzed (by use of common descriptive statistics--means, standard deviations, t test--correctional techniques and factor analysis) to discover current conditions and typical recreation technique practices. Important qualities of the leader seem to be an administrative and resourceful character, mental ability, and capability in leadership of certain recreational skills. Data indicate a need for development programs for leaders and their supervisors to increase their knowledge and appreciation of required skills for the position. A potential leader should have two-year training in recreation leadership, which might be provided by a junior college or vocational school.

See also: SECTION 6900 LIBERAL EDUCATION; Item 219 promoting art participation by older persons

- 426 STUDY ABROAD AND THE MIGRATION OF HUMAN RESOURCES. Myers, Robert G. Chicago Univ., T-13, 694, 378p., 67.

Emphasis in this study is on improving concepts and theory in the area of the nonreturn of foreign students after study in the United States. Part 1 examines definitions and measurements currently used. The volume and correlates of nonreturn identified from a census by the Institute of International Education are analyzed and cross-national comparisons of intended nonreturn are presented. Part 2 sets study abroad and nonreturn in the contexts of evaluating functional investment alternatives and of human resource migration in terms of a relevant concept of migration and of private and social decision-making models for analyzing educational opportunities and related migration. Part 3 is a case study of Peruvian students. Main variables include age, sex, field of study, socioeconomic status, sponsorship, type of visa, time spent in the United States, and expected earnings. (The document includes 73 tables, five figures, and numerous references.)

- 427 ADMINISTRATIVE PROBLEMS OF TECHNICAL ASSISTANCE TO COMMUNITY DEVELOPMENT AND AGRICULTURAL EXTENSION. Safa-Isfahani, Manouchehr. Syracuse Univ., 68-5488, MF \$4.70, HC \$16.45, D.P.A. thesis, 365p., 67.

An attempt was made to analyze the administrative problems of United States technical assistance to community development and agricultural extension programs in the Philippines, Pakistan, Iran, Thailand, and Nigeria, with emphasis on field problems and on the point of view of local administrators, field technicians, and local people. The concept of community development was too vague, and the concept of agricultural extension too general to provide constructive guidelines for a process whereby recipients could grow and manifest themselves in terms of culturally determined and nationally acceptable goals. Conflict and confusion existed between the two programs with regard to roles, organizations, planning and coordination of related activities, and the training of front-line workers. The donor's management of assistance was not serving as a helpful model for change. "Nationalized" concepts of community development and agricultural extension often did not conform to the ideas originally introduced by technical assistance. Foreign community development technicians in developing nations should be basically administrative innovators; agricultural extension technicians should be innovative specialists who can work with other specialized services in modernizing agricultural science and technology; and controls on use of aid should not hinder local initiative or the development of indigenous institutions.

- *428 FACTORS ASSOCIATED WITH ADJUSTMENT OF FOREIGN STUDENTS STUDYING EXTENSION EDUCATION AT SELECTED LAND GRANT INSTITUTIONS. Wilkening, Walter Theodore. Wisconsin Univ., 65-11,185, MF \$3.30, HC \$11.70, 256p., 65.

Three aspects of extension foreign students were examined: (1) appropriateness of programs available; (2) adjustment problems experienced; and (3) differences between extension foreign students and those in

other studies. The total foreign student population in agriculture extension, 80 students representing 28 developing nations, was studied at Cornell, Kansas State, Michigan State, and Universities of Mississippi and Wisconsin. Two staff members from each institution were also interviewed. The students' ages ranged from 21-49. Two-thirds were married, and most had scholarship support. It was found that major adjustment problems were to the educational system, and being away from family, friends, language, and cultural environment. Satisfaction with objectives of the study tour were expressed by 93% of the respondents, and all were unanimous in the desire for more practical experiences in extension activities. Satisfaction with their preparation for the study experience, suitability of housing, and their attitudes toward extension graduate study were the most significant positive factors in determining personal adjustment. Among differences between extension and other foreign students were that the extension students came exclusively from developing nations, were older, had work experience, and had twice as many scholarships.

- *429 THE INFLUENCE OF FOREIGN VISITORS ON THE INTEREST OF CERTAIN ADULT MEMBERS OF A HOSTING COMMUNITY IN PARTICIPATING IN INTERNATIONALLY ORIENTED ACTIVITIES. Benne, Max Erwin. Michigan State Univ., 67-10,507, MF \$3.00, HC \$6.80, Ed.D. thesis, 145p., 67.

The contribution of an organized community visit of a group of foreign visitors to adult education is the subject of this study. A group of foreign students visited the Chesaning, Michigan area over the 1966 Memorial Day week-end. Before the students arrived, 209 adults who live in the area completed a questionnaire that included the Sampson World-Mindedness Scale and the International Activities Scale. Of the 209 questionnaires returned, 175 were found usable. After the foreign students had visited and left, 97 of the 175 adults who initially returned the International Activities Scale, completed and returned a second copy of the scale. When treated as one unit, the post-visit scores of these 97 adults showed no significant increase over the pre-visit scores. However, when the returns were placed in quartiles on the basis of the pre-visit scores, significant increases were found in the scores. More significant increases were exhibited by adults who hosted a student or talked with one for at least one hour.

- 430 A STUDY OF THE SPAN OF IMMEDIATE MEMORY AMONG FOREIGN STUDENTS OF ENGLISH AS A FOREIGN LANGUAGE. Glicksberg, Daniel Hillel. Michigan Univ., 64-6685, MF \$2.75, HC \$7.00, 149p., 63.

An investigation was made of various facets of immediate memory span in a foreign language. Subjects were 160 foreign students taking eight-week intensive English courses at the University of Michigan, and a control group of 20 native speakers of English. Strict limitations were imposed on the lexicon, grammatical structures, and stress-pitch patterning used for stimulus material. Brief tests designed for small group administration were used: four forms using prepositional phrases as stimuli; tests of spans and errors for digits presented in English

and Spanish; a one-pattern test; and a situation context test. These were among the conclusions: (1) length of memory span in a foreign language, and amounts of increase in the foreign language span with greater English proficiency, depend on the type of material presented; (2) a standardized test of English aural comprehension for foreign students correlated significantly with the context test but less so with the one-pattern and digit tests; (3) foreign language digit spans can begin to approximate native language spans quite rapidly, with similar limiting factors in both languages; (4) stress and pitch were operant factors for native speakers of English but not for the foreign students.

- *431 CHARACTERISTICS OF INTERNATIONAL ALUMNI, CORNELL UNIVERSITY, 1935-1959. Green, Donald George. Cornell Univ., 64-13,802, MF \$3.65, HC \$12.85, 283p., 64.

This study examined the characteristics of foreign alumni of Cornell University from 1935 through 1959 and satisfaction with their experience at Cornell. Data came from university records and from 1,110 respondents (34% of those surveyed). These are among the major findings: (1) graduate students predominated; (2) 3/4 of students were admitted to the Colleges of Agriculture, Engineering, and Arts and Sciences; (3) 54% earned Cornell degrees, of which 20% were doctoral and 54% master's; (4) graduate degrees declined but undergraduate degrees rose slightly; (5) composition shifted from largely Far Eastern and Canadian to largely European; (6) half the respondents had English difficulty; (7) graduate programs averaged eight or nine months longer than the minimum; (8) most respondents did not report serious housing, health, food, or financial problems; (9) 70% or more were satisfied; (10) high satisfaction was associated with degree completion, graduate admission status, lack of English difficulty, and early training termination.

See also: Item 290 Community Development Division of ICA and international education; 161 administrative problems of AID technical assistance; 308 assessment of international nurses in the U.S.

7500 INSTITUTIONAL SPONSORS

- *432 A GROWTH MODEL OF INSTITUTIONS OF ADULT EDUCATION. Griffith, William S. Chicago Univ., T-10,155, 342p., 63.

This study sought to discover a characteristic sequence of progressive developmental phases of institutions of adult education as a means of increasing knowledge of the growth process, demonstrating the similarity of such institutions, and facilitating more effective planning for those engaged in institutional adult education work. The use of quantitative data concerning programs, personnel, clientele, finances, and physical plants revealed marked similarities of patterns for five selected adult education institutions. Because of the influence of major environmental changes reflected in these quantified variables, historical reviews of the institutions were needed for correct interpretation of growth curves. Six growth stages, from genesis of the new system to

accommodative steady state (maturity), were identified and described in a model of an ideal developmental sequence. The nature of an institution can probably be judged more readily with this model than by examining data from a given point in time. The model must be extended in order to be useful in interpreting changes after an institution has reached maturity.

7510 COLLEGES AND UNIVERSITIES

- *433 AN HISTORICAL ANALYSIS OF THE DEVELOPMENT OF SELECTED AREAS OF UNIVERSITY EXTENSION PROGRAMS IN THE UNITED STATES, 1900-1965, AS RELATED IN PROFESSIONAL LITERATURE. Jessup, Michael Hyle. George Washington Univ., 6/-15,933, MF \$3.00, HC \$8.60, Ed.D. thesis, 189p., 67.

This study is concerned with the historical development of certain areas of university extension--credit and noncredit courses, correspondence study, and conferences, institutes, and short courses--which appear widespread and important in current extension programs. Credit and noncredit courses and correspondence study were among the earliest extension offerings. Although conferences, institutes, and short courses also developed quite early, they received new emphasis in the 1950's when institutions built or obtained continuation centers. Except for noncredit correspondence study, each area has experienced continuous growth and is offering more programs to increasingly larger student audiences. Both credit and noncredit courses have been provided to meet emerging educational needs and courses for business and industry have increased since World War II. Cooperation between the Federal government and university extension appears to be increasing. There is a growing emphasis on designing programs for specific groups. Despite the growth of university extension and its acceptance as an important function of higher education, criticism of program quality, the work done by students, and the professional laxness of instructors has long persisted. There are definite gaps in pertinent professional literature, especially on institutions which are not members of the National University Extension Association.

- *434 THE UNIVERSITY EXTENSION MOVEMENT IN THE UNITED STATES AND ITS IMPLICATIONS FOR THE MIDDLE EAST TECHNICAL UNIVERSITY, TURKEY. Oguzkan, Abdulbaki Turhan. Ohio State Univ., 66-6286, MF \$4.45, HC \$15.75, 346p., 65.

The study was to evaluate the university extension movement in the United States and to draw implications and recommendations concerning the extension function as applied to the Middle East Technical University, Turkey. The data were collected through library research and a limited number of visits to university extension centers in the United States. Present extension activities in the Middle East Technical University were assessed by use of a number of forms designed for the purpose. Some significant conclusions were: the university extension movement in the U.S. seems to have been closely tied to the forces deeply affecting the society; the experience gained and the research

done in the field have been instrumental in defining major issues and problems facing the extension workers in the university environment but more research and experimentation are needed; several ideas from the U.S. can be profitably tested in Turkey; and although a number of uncoordinated and sometimes spontaneous extension activities are evident in the Middle East Technical University, the institution at present lacks a well defined and firm commitment to the dissemination of knowledge among the general public.

- 435 HISTORICAL DEVELOPMENT OF BRANCHES OF THE UNIVERSITY OF CONNECTICUT. Wyllie, Robert Hugh. Connecticut Univ., 64-3574, MF \$2.75, HC \$2.75, 126p., 63.

This study describes the development of the Hartford, Stamford, Torrington, and Waterbury branches of the University of Connecticut from their beginnings as Division of University Extension programs to their present status (1963) as educational units enrolling a fourth of the undergraduate student body. It also describes the Fort Trumbull Branch program, the University's major effort to meet heavy demands for higher education by veterans of World War 2. Each branch program began as a small assortment of course offerings given in public school classrooms. As student enrollment increased the programs were expanded and the enlarged curricula attracted greater numbers of students. Growth of the programs prompted action to acquire permanent facilities, and the Hartford, Stamford, and Waterbury branches now occupy their own campus. The Torrington campus will be occupied as soon as a building is completed. The Fort Trumbull Branch was set up for a limited period, in borrowed quarters, as a resident campus with a temporary staff, and was terminated after four years.

- 436 A HISTORY OF THE EXTENSION DIVISION, RUTGERS-THE STATE UNIVERSITY 1891-1965. Dee, Frank Paul. Rutgers, The State Univ., 67-6399, MF \$3.35, HC \$11.70, Ed.D. thesis, 257p., 66.

In 1891 Rutgers College began offering extension work in agriculture, history, the arts, and scientific subjects. The Industrial Extension Division, established in 1925 and renamed the University Extension Division in 1927, was conducting college credit courses within a year of its founding; and, in 1934, University College was established as a part-time degree granting unit of the University. During World War II almost all of the Extension staff transferred to the College of Engineering where they administered the Engineering, Science, and Management War Training Program subsidized by the Federal government, in which free courses were conducted for employees doing defense work in industrial plants. From 1940 to 1945 over 40,000 students were trained in 200 subjects, under the provisions of the National Defense Act of 1940. Some general extension courses were also conducted but they were limited by staff shortages. Since the end of World War II extension work at Rutgers has proliferated. Courses offered at four extension centers and conferences in special subject areas have reached almost 20,000 persons each year and contribute greatly to the image of Rutgers as The State University.

- 437 A HISTORY OF THE DIVISION OF GENERAL EDUCATION, NEW YORK UNIVERSITY, 1934-1959. Freidus, Anne. New York Univ., 64-279, MF \$2.80, HC \$9.70, Ed.D. thesis, 214p., 63.

This study of the first 25 years of the Division of General Education at New York University concentrates on purpose, philosophy, program and operation, formal organization, and size of student body and staff. The Division provides a program of noncredit courses for adults, together with such extension-type services as the Center for Safety Education, the Office of Special Service to Business and Industry, the Reading Institute, the Testing and Advisement Center, and Town Hall. Its first seven years (1934-41) were administered to include off-campus credit courses for teachers, noncredit courses, and the beginnings of extension services; but in 1941, when the School of Education reassumed the administration of off-campus education courses, the Division became mainly concerned with noncredit adult education. Factors important in its history were the pattern of autonomous schools at New York University, the commitment after 1941 to planning for adult needs and interests, autonomy within the Division itself, and the history of the period, including the Depression, World War II, and postwar socioeconomic trends. (The document includes 117 references, 27 tables and figures, and appendixes.)

- 438 SOME FACTORS AFFECTING THE EVENING COLLEGE AS IDENTIFIED IN THE LITERATURE AND IN A STUDY OF THE EVENING STUDENTS IN A STATE COLLEGE. Thornburg, Roland Albert. Alabama Univ., 67-1334, MF \$3.00, HC \$8.80, Ed.D. thesis, 187p., 66.

This study investigated factors affecting the evening college as identified in the literature and in the study of the evening students in a state college. The literature was surveyed, and a questionnaire developed and administered to 166 students enrolled in evening classes: 82 part-time adults and 84 full-time day students. Comparisons of characteristics were made between the two groups. According to the literature, many evening college administrators appeared to be lacking in experience and training. The majority of both groups of students thought that evening instructors were "good" or "excellent" teachers. The majority of the evening students thought that their instructors had been lecturers; however, the students seemed to prefer group discussion. All evening students said they had needed counseling. Slightly over half believed their instructors had not been well acquainted with them personally. The part-time adult students attended evening college for utilitarian and vocational reasons.

- *439 A STUDY OF THE ESTABLISHMENT OF GRAND VALLEY STATE COLLEGE. Swets, Marinus Matthius. Michigan State Univ., 64-966, MF \$4.85, HC \$17.10, 380p., 63.

This study covered the period from the establishment of Grand Valley State College, Michigan, in 1960, through the appointment of the first full-time administrator. Data were gathered from newspaper files,

legislative journals, and other relevant sources. Efforts of the Committee to Establish a Four-year College, fund-raising, securing a site, the creation of amicable relations with other institutions of higher education, and the formation of a citizens' advisory council were documented. These were among the conclusions on the success of voluntary community enterprises: leaders are intelligent, decisive, enthusiastic, articulate, and not selfishly motivated; they have integrity, faith in a constant community education program using many media and activities; they divide their work to best advantage and use expert advice to support their aims; a conservative community will not thwart their efforts if social and economic benefits are perceived; key legislators will not give opposition if the community voices neither approval nor disapproval.

- 440 SCOPE AND CHARACTERISTICS OF UNIVERSITY OFF-CAMPUS CENTERS IN THE UNITED STATES. Henstrom, Richard Henry. Brigham Young Univ., 66-10,515, MF \$3.65, HC \$12.85, Ed.D. thesis, 284p., 66.

This study investigated the philosophy, organizational structure, administration, and curricula of university off-campus centers in the United States. In addition to statistical data, answers were sought on such matters as professional and regional accrediting associations, the establishment and continuance of centers, research projects in centers, and course credits. Questionnaires were sent to 119 parent institutions, 27 accrediting associations, and 207 centers. These were among the findings and conclusions: (1) 53 institutions operated 207 centers; (2) the chief problem areas were obtaining enough qualified faculty, supplying adequate library books and periodicals, having sufficient library and classroom facilities, and meeting financial obligations; (3) major factors determining course offerings were (in rank order) course demand, availability of faculty, course sequences and required courses, and college and departmental recommendations; (4) accrediting associations generally have no specific criteria for off campus centers; (5) 76 centers were not permanently owned by their parent institutions; (6) major academic areas were (in rank order) social sciences, humanities, business, physical sciences, engineering, and education.

- 441 A DESCRIPTIVE ANALYSIS OF THE EVENING AND OFF-CAMPUS POPULATION, TEMPLE UNIVERSITY FALL SEMESTER, 1966-1967. Sackett, Duane Harry. Temple Univ., 68-9033, MF \$3.00, HC \$8.60, Ed.D. thesis. 190p., 67.

This study sought: (1) to describe the total population (fall semester 1966-67) of the evening and off-campus divisions of Temple University; (2) to identify evening and off-campus students' educational needs, goals, and aspirations, university needs, and purposes relative to its evening division, and the portion of nondegree evening and off-campus students for which the College of Education has or should have basic responsibility; and (3) to suggest for the College of Education an administrative structure better suiting the needs of its evening and off-campus students. Two questionnaires and the 1967 Middle States Report gave data on sex, age, residence, and other student characteristics and variables. Based on the numerous findings and conclusions, recommenda-

tions affecting evening and off-campus study were made for a clear statement of policy; a specific set of rules and regulations; maintenance of the existing vertical administrative relationships to day college; fuller administrative provision for off-campus, non-degree, and College of Education students; arrangements for statistical reporting, research, and evaluation; and systematic counseling and preadvising services.

- 442 A COMPARATIVE STUDY OF DAY AND EVENING UNDERGRADUATE STUDENTS IN TEMPLE UNIVERSITY SCHOOL OF BUSINESS ADMINISTRATION. Shultz, John Stevenson. Temple Univ., 67-6257, MF \$3.00, HC \$10.60, Ed.D. thesis, 231p., 66.

A comparative study was made of the day and evening undergraduate students in Temple University School of Business Administration. Pre- and post-tests were given and data accumulated on ten educational and personal factors; and performance of each class was analyzed against these factors. The findings showed that the day and evening populations were similar in most respects except that the former were juniors and the latter sophomores. When the influence of the Bachelor of Arts students was eliminated, there was no statistically significant difference between day and evening scores for the remaining students (92% of the day and 98% of the evening populations). Those persons carrying heavier loads for both day and evening classes tended to have slightly higher ending scores. Among the day students an increase in age seemed to result in improved test performance. This was not true of the evening students, for whom test performance and age were independent.

- *443 A COMPARISON OF THE CLASSROOM ACHIEVEMENT OF EVENING AND DAY STUDENTS IN COLLEGE COURSES. Ulmer, Roland C. Florida State Univ., 65-9419, MF \$3.00, HC \$4.80, 93p., 65.

The achievement of students in day sections of six junior college courses was compared with that of students in parallel evening sections of the same courses. In a second phase of the study, the achievement of students under 21 years of age was compared with that of students at least 21 years old. Achievement gains were measured by comparison of results of a pretest with evaluations made at 6-week intervals. In general, evening students performed at least as well as their day class counterparts, regardless of whether achievement was measured by teacher-constructed or standardized tests. Young low-ability students in the evening classes performed better than corresponding students in the day classes.

- *444 THE ROLE OF NIGERIAN UNIVERSITIES IN ADULT EDUCATION. Nwokorie, Iheanacho Sunday. California Univ., 65-2550, MF \$3.75, HC \$13.30, Ed.D. thesis, 291p., 64.

The adult education programs of two Nigerian universities were examined, and conclusions about the strengths and weaknesses of these programs in terms of Nigeria's needs reached. Documentary data were secured from general and specialized works on adult education, UNESCO publications, Nigerian Federal and Regional Government publications, the annual reports of the Departments of Extra-Mural Studies of two universities, the reports of the commissions on Nigerian education, and conferences on education in Africa. Further information was secured from interviews. Tutorial classes take up a sizable proportion of the time and resources of the extra-mural departments of Ibadan and Nsukka. Programs include: refresher courses for teachers; residential conferences for legislators, civil servants, trade unionists, employers in labor and industry, and local government officials; annual seminars for extension workers, poultry farmers, and government agriculturalists; and public lectures on a wide range of topics. Clarification of objectives, realistic revision of methods, and adoption of programs which equally emphasize liberal education and vocational training are needed.

See also: SECTION 5400 HIGHER EDUCATION - ACADEMIC PROGRAMS: 5700 PROFESSIONAL, TECHNICAL CONTINUING EDUCATION; Item 337 effectiveness of executive development program; 492 trainer role in Indiana Plan Institute; 431 characteristics of international alumni of Cornell; 426 non-return of foreign students in American universities; 361 secretarial programs, University of Cincinnati; 224 administration of programs for women; 166 faculty commitment to conference participation; 168 conference director as boundary definer; 187 model for integrating general and agricultural extension; 172 evening teacher performance, University of Tennessee; 171 evening college staffing problems in 12 institutions; 165 application blank for part-time evening college faculty; 121 television in State University of New York; 116 use of university a-v center by business and industry; 1 use of Whiteheadian principles in university adult education; 25 class rank related to participation and other variables; 45 student government for married students; 44 Servicemen's Readjustment Act; 58 program planning in residential centers; 59 program planning in university continuing education centers; 60 evaluation of residential programs; 57 survey of continuing education centers; 65 study habits and learning in college classes; 287 student reaction to civil defense program; 279 agency administrative roles in Title I; 278 role of university in state change; 280 Title I in Tennessee; 398 liberal education students, University of Oklahoma; 14 evening students at Drake University; 67 non-credit extension students at UCLA

7600 COOPERATIVE EXTENSION SERVICE

- *445 DEVELOPMENT OF EXTENSION IN LAND-GRANT INSTITUTIONS. Riley, Thomas L. Chicago Univ., 386p., 65.

An attempt was made to trace the development of the extension services of the land grant universities from 1862 through 1914, the year in which significant federal funds for agricultural extension were provided by the enactment of the Smith-Lever Bill. Information was obtained from the Bureau of the Census, the United Congressional Globe, Congressional Record, House Committee on Agriculture Hearings on the

Lever Agricultural Extension Bill, Commission Reports, and Statutes at Large. There were four major chronological divisions: 1862 to 1887, years marked by a struggle for survival of the new colleges and a growing awareness of the necessity for, and the attempts to secure, popular support; 1888 to 1902, the period of significant beginnings of agricultural and university extension in the land-grant universities; 1903 to 1907, the initiation of major federal agricultural extension efforts and the beginning of progressive reforms designed to extend the benefits of higher education to all citizens; and 1908 to 1914, the continued development, expansion, and further separation of the two extension services.

- *446 THE WASHINGTON STATE AGRICULTURAL EXTENSION SERVICE, 1912-1961.** Cosgriffe, Harry A. Chicago Univ., T13066, 323p., 66.

A study was made of the Washington Agricultural Extension Service from 1912 to 1961 to identify and interpret the changing administrative structure, program content, methods and techniques, relationships with other organizations and agencies, fundamental changes in ways of deciding educational content, influences of the Extension Service on Society, and societal and other influences on the Extension service. Beginning efforts and activities in agriculture, home economics, and Four-H work and in agent training (1912-20) were followed by a period of adjustment (1921-29) in such areas as program philosophy, financing, and staffing. The Depression (1930-41) created many new Extension Service clients and led to an emphasis on local meetings, farm and home visits, and mass media. Except for the new Neighborhood Leadership Program, wartime methods (1941-45) did not change greatly, and the war effort and postwar planning were dominant. The Agricultural Extension Service responded to postwar conditions and problems (1946-61) by adjusting the duties of staff members, engaging in self-study and introspection, adding new programs, activities, and techniques, and modifying the agricultural, home economics, and Four-H programs. The document includes physical and geographic background data, 19 tables, and an extensive bibliography.

- *447 MINNESOTA EXTENSION WORKERS' EVALUATION OF A PROPOSED SET OF COOPERATIVE EXTENSION PROGRAM PLANNING CONCEPTS.** Kincaid, John Marcus. Wisconsin Univ., 64-10,251, MF \$3.35, HC \$11.70, 259p., 64.

This study described and appraised a proposed set of Minnesota's Cooperative extension program planning concepts. Four criteria, each subdivided into eight component planning dimensions, were proposed as standards. A total of 193 supervisors and county agents were surveyed by questionnaire on the extent of agreement with the dimensions, estimates of county agent performance, agents' attitudes toward activities implied in the dimensions, and the relation of agents' perceived performance to area of program responsibility, tenure, formal training in program planning, highest degree earned, and the major field of study for that degree. These were among the conclusions reached: (1) respondents' high level of agreement as to the validity of dimensions, and the positive relationship between agents' perceived performance

and supervisors' ratings, support the proposed dimension as descriptive of an effective program planning process; (2) the agents felt that their performance of the planned activities was important to success in planning current county programs; (3) the area of program responsibility was the chief influence on agents' perceived performance.

- *448 CENTRALIZATION OF DECISION-MAKING AND ORGANIZATIONAL EFFECTIVENESS IN THE COOPERATIVE EXTENSION SERVICE. Howes, Merle Lee. Wisconsin Univ., 63-7628, MF \$2.75, HC \$6.60, 139p., 63.

A study was made of relationships, in 13 states of similar size, between centralization of decision-making within the Cooperative Extension Service and the organizational effectiveness and administrative styles of state Extension directors. Decisions were made either at state headquarters (land-grant institutions) or in the counties. Measures of centralization included the extent of decision-making at the state level, percentages of staff in administrative or supervisory positions, and sources of funds (county, state or Federal). Effectiveness was measured by interpersonal relationships within the organization, agreement on objectives at, and between, state and county levels, and such professional field-staff characteristics as tenure, education, and separation rate. Administrative styles were judged by type of supervisions (from permissive to restrictive) and employee program or public relations orientation. On the basis of rates of agreement between supervisors and field staff, staff stability, and significant correlations between centralization and such variables as funding (state and Federal), low separation rate, and state directors' duties, it was concluded that the more centralized structures tend to be more effective than decentralized structures.

- 449 THE OHIO COOPERATIVE EXTENSION SERVICE AS PERCEIVED BY RESOURCE DEVELOPMENT COMMITTEE REPRESENTATIVES. Jenkins, David Dwight. Ohio State Univ., 65-5648, MF \$4.10, HC \$14.40, 318p., 64.

This study investigated perceptions of resource development committee representatives regarding organizational and program aspects of the Ohio Cooperative Extension Service, and factors associated with the perceptions. Four rating systems were used to measure dimensions of 95 statements on intensity of involvement, knowledge of the organization, the importance of various aspects, and the performance by the Cooperative Extension Service as an educational agency. Respondents to the mailed questionnaire were 165 committee members and 119 consultants (a 53.1% return). These were among the findings: (1) the majority of the respondents were associated with farming and agricultural industrial occupations and were interested in education for farming, homemaking, and youth work; (2) they viewed as most important those extension goals, functions, and program areas relating to farm family living; (3) intensity of one's own involvement with the Extension Service was the main determinant of perception; (4) the Cooperative Extension Service was seen as basically a rural oriented, immediate problem-centered educational program.

- 450 AN EXPLORATION OF FACTORS ASSOCIATED WITH NORTH CAROLINA LEGISLATORS' PERCEPTION OF THE NORTH CAROLINA AGRICULTURAL EXTENSION SERVICE. Smith, George Watson. Duke Univ., 68-3447, MF \$3.25, HC \$11.50, Ed.D. thesis, 252p., 67.

This study focused on the influence of selected personal factors on North Carolina legislators' perceptions of the North Carolina Agricultural Extension Service. A review of the theories of perception and related research was coupled with interviews with 145 members of the 124th General Assembly of North Carolina. Concepts of the district or county represented, degrees of involvement with the Agricultural Extension Service, place of residence, occupation, length of legislative service, and size of farm or business were the independent variables. Findings included the following: (1) each variable was significant for at least two, and as many as ten, of the 42 elements of perception examined; (2) degree of involvement with the Extension Service was the chief variable; (3) next came business or farm size, with seven significant associations, and occupations, with six; (4) length of service and concepts of the type of county or district represented were generally the least important. Research was recommended on such topics as means of communicating with legislators and legislators' perception of their role.

- *451 COOPERATORS' VIEWS OF THE UNIVERSITY OF CALIFORNIA AGRICULTURAL SERVICE. Marders, William Glenn. California Univ., Berkeley, 64-13,051, MF \$5.50, HC \$19.60, Ed.D. thesis, 432p., 64.

For this study which aimed at describing metropolitan and non-metropolitan farm and home advisor clients and their views of Agricultural Extension Service programs and needs, two Californian metropolitan and non-metropolitan counties were selected on the bases of an index of metropolitanism computed by the Agricultural Extension Service, accessibility of counties, staff size, programs, and availability of records. Data were obtained from 300 farm and home advisor clients by means of a precoded, pretested schedule. Similarities between metropolitan and non-metropolitan respondents exceeded differences with respect to socioeconomic characteristics, participation in the farm and home advisor programs and activities, and respondents' views of the program of the Agricultural Extension Service. Although the majority of respondents believed that farm and home advisors should provide appropriate programs for non-farm families, they were unfamiliar with the agricultural extension program. They did not agree on helpfulness of teaching methods; about half found the advisors helpful. A higher proportion of metropolitan than non-metropolitan respondents found all the programs necessary.

- *452 MEAT PACKERS' AND PROCESSORS' PERCEPTION OF THE ALABAMA EXTENSION SERVICE. Cavender, Alfred Ray. Wisconsin Univ., 64-3205, MF \$3.20, HC \$11.25, 246p., 64.

The purpose of this research was to determine and study the perception of the Agricultural Extension Service held by managers of Alabama meat packing and processing firms. In the spring of 1963, data were obtained by interviewing a sample of 78 managers stratified by type of operation. Higher formal education was positively related to greater involvement in and better understanding of Extension programs. More managers of small and medium sized firms were of the opinion that additional livestock production specialists would be of greater assistance to the industry than were those representing large firms. Packers as a group and managers of medium and large sized firms gave a higher rating to the Extension function of "locating breeding livestock and seed supplies for farmers" than other respondents. Managers with lower educational levels considered programs dealing with "family living" and "community resource development" as more important than did those with higher educational levels. All of them were not well informed on the organization of the Extension Service with respect to its relationships to county-governing bodies.

- *453 STATE LEGISLATORS' PERCEPTION OF THE NORTH CAROLINA COOPERATIVE AGRICULTURAL EXTENSION SERVICE. Blalock, Thomas C. Wisconsin Univ., 63-5734, MF \$4.30, HC \$15.10, 333p., 63.

North Carolina's state legislators were interviewed to obtain their perceptions of the Agricultural Extension Service. Of the 145 interviews, 119 were analyzed to examine the relationship between various elements or components of perception. It was found that the majority of legislators viewed Cooperative Extension as an educational agency primarily working with farm people. The level of understanding of the Extension organization and financing was relatively low, as was the perception of the importance of various program areas and time and effort spent. There was a high regard for Extension staff training and ability.

- *454 DAIRY PLANT MANAGERS' PERCEPTION OF THE MINNESOTA AGRICULTURAL EXTENSION SERVICE. Abraham, Roland Harold. Wisconsin Univ., 63-7568, MF \$4.50, HC \$16.00, 352p., 63.

This study was made to determine and analyze perceptions of the Agricultural Extension Service which were held by 159 randomly chosen managers of Minnesota dairy products plants. Levels of understanding, program appraisals, and estimates of Extension personnel competence were the major variables of perception. It was also hypothesized that perceptual variables relate to certain characteristics and situational variables of managers. Personal interviews included a questionnaire to assure comparability of data. Major findings included: (1) the managers' involvement in Extension activities was significantly and positively related to perceptions of Extension; (2) levels of understanding were related to formal education, length of managerial experience, involvement in Extension activities, and business size; (3) plant managers held somewhat ambiguous perceptions of the relative importance of educational versus service oriented activities of the Extension.

sion Service; (4) managers were not well informed on its organization or its relation to the University of Minnesota; (5) levels of involvement were the strongest influence on perceptions; and (6) managers and Extension staff agreed that plant personnel could convey technical and economic dairy information to plant patrons.

- 455 FARMER ATTITUDES TOWARD THE COOPERATIVE EXTENSION SERVICE IN ILLINOIS: A BASIS FOR COMMUNICATION STRATEGY. Jarnagin, Robert Allison. Michigan State Univ., 65-691, MF \$3.65, HC \$12.85, 284p., 64.

In this study, the attitudes of Illinois commercial farmers were assessed toward: (1) the impersonal, institutional aspects of the Cooperative Extension Service, (2) the more personal attitudes toward county farm advisors and State Extension specialists, and (3) the place of Extension as a source of agricultural information. Stephenson's Q-technique was used with a structured sample of 60 Illinois commercial farmers in 10 counties. Results of the analysis showed three distinct types of commercial farmers on the basis of their attitudes toward both the Cooperative Extension Service and sources of agricultural information. Factor analysis showed only one major type of farmer attitude toward the county farm advisors and state specialists, plus scattered individual divergent patterns. The important attitude statements described the characteristics of each type. In general, the study showed a very favorable pattern of attitudes toward Cooperative Extension and its personnel, and its place as a reliable source of agricultural information.

See also: SECTION 1890 RELATIONS WITH GOVERNING, ADVISORY GROUPS; 2230 RURAL COMMUNITIES; 4010 TEACHERS, LEADERS, CHANGE AGENTS IN EXTENSION; 4625 YOUNG ADULTS (4-H); 6700 AGRICULTURE, HOME ECONOMICS; Item 428 adjustment of foreign students studying extension in land grant universities; 417 influence of extension programs on home practices; 401 attitude of voluntary extension leaders toward issues of public education; 382 knowledge of Missouri Extension held by freshmen and home economics students in six universities; 234 Cooperative Extension services to lower socioeconomic citizens; 200a objectivity of procedures of extension agents in evaluating educational programs; 30 guide for analyzing youth program planning processes; 39 migration in North Carolina; 35 projecting educational audiences and needs; 52 planning total resource development in a Wisconsin county

7700 JUNIOR COLLEGES

- *456 PRACTICES OF MICHIGAN COMMUNITY COLLEGES IN PROVIDING PROGRAMS FOR ADULTS. Bielinski, W. Victor. Michigan State Univ., 64-921, MF \$3.20, HC \$11.25, 248p., 63.

In order to describe practices of the 16 community colleges of Michigan in providing programs for adults, data were obtained from college catalogs, other literature, questionnaires, and interviews involving 597 administrative and faculty persons. Findings generally indicated a broad range of educational opportunities for special services for adults;

flexible administrative and instructional practices; varied faculty opinions on adult programs; needed changes and improvement relating to organization, financial support, counseling, facilities, and staffing; and trends toward program growth, improvement, and wider cooperation. Conclusions included: (1) kinds of programs and institution size are related to adult enrollments; (2) increases in kinds of programs, institution age, and adult enrollments are related to use of advisory groups, level of responsibility or adult program directors, and a merger trend of previous adult education and new community college programs; and (3) increases in kinds of programs, institution size, and numbers of students are related to provisions for adults.

- *457 A STUDY OF THE ADMINISTRATION OF MICHIGAN JUNIOR COLLEGES. Stanbury, Donald Edward. Michigan State Univ., 66-6172, MF \$3.00, HC \$7.00, 147p., 65.

This study analyzed and compared administrative organizations and operational patterns of 18 Michigan junior colleges in full operation during the 1964-65 school year. Related literature was reviewed on historical, theoretical, functional, and other aspects of educational administration. A questionnaire was sent to the top official of each institution. Data on organizational structures and patterns and the relationships between them were analyzed, and operational factors in these structures and patterns were sought. Organizational charts, a list of administrative duties, and a list of committees and their functions were also requested. Based on findings, the investigator recommended development of an organizational chart as a guide in reorganizing junior colleges and establishing new ones. Related suggestions were for a study to set guidelines for administrator titles and duties, analysis of job specifications, extensive application of theory in organizing and reorganizing administrative structures, and steps by the Michigan Association of Junior Colleges to involve more faculty in the decision-making process.

- 458 AN APPRAISAL OF PRACTICES OF ADULT EVENING PROGRAMS OF COMMUNITY COLLEGES IN WASHINGTON STATE. Kahn, Louis. Washington State Univ., 66-7145, MF \$3.00, HC \$5.20, Ed.D. thesis, 102p., 66.

This study assessed the practices of the adult evening programs of community colleges in Washington State. From a survey of the literature, a list was made of practices recommended by writers in the field of adult education and was used in developing an appraisal instrument, which was then refined by a trial group of respondents. The refined instrument was sent to a representative jury of state adult education directors, community college adult education administrators, and college instructors of adult education courses, who were asked to indicate the importance of each statement on a five-point rating scale ranging from desirable to essential. Appraisal instruments were also sent to the adult education program directors at all the community colleges in the state to determine whether the practices included in the questionnaire were being followed. Conclusions indicate a wide range of administrative practices among the adult program directors, and a lack of agree-

ment between those who teach about community college adult education and those who administer college adult programs. (The document includes 28 tables, 68 references, and appendixes.)

- *459 ADULT EDUCATION IN SELECTED COMMUNITY COLLEGES OF STATE UNIVERSITY OF NEW YORK, ITS SUPPORT AND CONTROL ACCORDING TO THE RECORDS AND AS REPORTED BY COLLEGE OFFICIALS. Schwartz, Leonard C. Syracuse Univ., Ed.D. thesis, 226p., 66.

The education of the part-time student in New York State community colleges and how this program has been financed and controlled were studied. The public community colleges selected had offered programs for at least 3 years and were located outside N.Y. City. Each campus was visited and structured interviews were held with the president, deans, business managers, and other officials. Budgets, handbooks, board minutes, policy manuals, and catalogs were examined. It was concluded that evening divisions were established to satisfy community needs and demands. The programs were not the result of conscientious study of continuing education of adults, but were usually a repetitious offering of day courses plus a few non credit courses. Evening costs were met from tuition fees and surpluses were used within the total budget. Differences in support and control reflect the philosophy of adult education. The pressure of an enrollment economy in operating an evening program to satisfy community demands at no cost to the college caused the evening division to be viewed as an income-providing appendage rather than an integral part of the college serving the adult part-time student. There are charts, tables, a map, and 122 references.

- 460 JUNIOR COLLEGE NON-CREDIT ADULT EDUCATION PROGRAMS, THE RELATIONSHIP OF PROGRAM GUIDELINES AND SIZE TO INSTITUTIONAL, PROGRAM, AND ADMINISTRATIVE PERSONNEL CHARACTERISTICS. Burgess, J. Fred. Florida State Univ., Ed.D. thesis, 104p., 66.

Five guidelines for planning and administering non-credit programs for junior colleges were: (1) program flexibility, (2) presence of coordinated objectives, (3) consideration of educational needs of the community, (4) continuous evaluation, and (5) cooperation with other educational agencies. There were 25 guideline practices. A pre-tested questionnaire was sent to directors of adult education in 123 junior colleges in the U.S. to determine the degree to which guidelines were followed, gather information about institutions, programs, and personnel, and determine relationships among guidelines and programs. Data were analyzed by 28 chi square tests. Both program size and degree of compliance to guidelines is influenced by the amount of personnel time committed to programing. In the larger programs, the non-credit director has a policy-level position and a doctor's degree, and gives substantial time to the program's operation. Recommendations for further research, a section on guideline selection, the questionnaire, and a bibliography are included.

See also: Item 418 studying community needs for community college programs; 407 cultural service provided by junior colleges in U.S.; 360 guidelines for post-secondary distributive education programs in Ohio; 281 urban problems and the community college; 283 community services in New York; 282 in Pennsylvania; 275 reading program Odessa College; 226 married women students at Lansing College; 173 staff needs in North Carolina technical institutes; 167 teacher allocation decision making design; 169 part-time vocational instructors in Michigan; 178 educational needs of industrial training directors; 170 supervision and evaluation of new part-time teachers

7800 PUBLIC SCHOOLS

- 461 A SURVEY OF THE PRESENT STATE OF PUBLIC SCHOOL ADULT ELEMENTARY EDUCATION IN THE UNITED STATES AND A FORMULATION OF PROGRAMS FOR USE IN ADULT ELEMENTARY EDUCATION. Willcox, Wanda Marie. Miami Univ., 64-4032, MF \$2.75, HC \$7.49, Ed.D. thesis, 160p., 63.

This study aimed at surveying public school adult elementary education in the United States; developing a minimum program consisting of offerings considered by the 50 state departments of education to meet minimum requirements for eighth-grade credit for adults; and designing an adequate program including both basic educational courses and enrichment courses consistent with the needs and objectives of adults at the elementary levels. An 87% response was obtained through questionnaires sent to 910 adult education administrators in communities throughout the 50 states, the District of Columbia, Puerto Rico, and American Samoa. No adult elementary classes were offered in the communities of 378 administrators; consequently, results and tables of data are generally based upon 413 replies. A program intended to meet minimum standards for adult literacy in any state was designed from information on state policy sent by 50 superintendents; the adequate program was prepared with the assistance of experts. Eighty-three percent of the respondents found the former acceptable; 45% the latter. Another 34% found the adequate program acceptable with modifications.

- 462 VALIDATION OF THE OBJECTIVES OF PUBLIC SCHOOL ADULT EDUCATION. Smith, Joseph Richard. California Univ., 67-0544, MF \$3.00, HC \$7.40, Ed.D. thesis, 133p., 66.

The major goals of public school adult education identified in this study are: (1) general education for self-realization, (2) occupational education for economic efficiency, (3) citizenship education for civic responsibility, (4) homemaker education for family life, (5) special education to meet individual and community problems, (6) recreation education for use of leisure time. The objectives which contribute to the achievement of these goals are listed. Procedures used include: consultation and interviews with professors of adult education and with chief administrative officers in state departments of education and state and national professional associations of public school adult educators, a survey of the literature relating to adult education in the

public schools, examination of program offerings in school districts participating in the study, evaluation of replies from a panel of authorities on objectives of public school adult education, analysis of the degree of agreement between adult educators and the panel, and drafting a statement of objectives of public school adult education.

- 463 A HANDBOOK FOR DIRECTORS OF ADULT EDUCATION IN THE STATE OF UTAH. (WITH TEXT AND THE HANDBOOK). Durfey, F. Cline. Brigham Young Univ., 64-1192, MF \$3.00, HC \$9.25, Ed.D. thesis, 205p., 63.

This study was to develop a handbook for directors of adult education in the State of Utah. A survey of periodicals, texts, documents, and adult education handbooks was made to obtain information pertinent to the subject. The material from numerous handbooks from many state departments was organized and synthesized to get the basic criteria for the contents. Emphasis was placed upon information which could be applied to the State of Utah. Nationally known judges in the field of adult education of the States of Utah and California reviewed the handbook and offered suggestions before final publication. This study pointed out that: job opportunities for unskilled workers were declining and individuals in the labor force found it necessary to equip themselves with tools of basic education plus specialized training; the proposed handbook would be adapted and changed as it was tested in the field; many adult education programs in the state had developed directly or indirectly from the stimulus provided by the Federal Vocational Education Acts; and the State of Utah could not advance faster economically than it did educationally, and that was the period of transition during which educators had responsibility for the future.

- *464 MINORS IN CLASSES FOR ADULTS IN TWENTY-SEVEN LOS ANGELES CITY ADULT SCHOOLS. Johnston, William Joseph. California Univ., 66-208, MF \$3.50, HC \$12.15, Ed.D. thesis, 269p., 65.

Minors in adult classes in the Los Angeles Unified School District were studied to assess the extent of their acceptance by teachers and administrators, analyze student characteristics, and appraise their educational success. Teachers indicated class enrollments by three age groups: 16 and 17, 18 to 20, and adults 21 and over. Questionnaires from 1,078 students were also analyzed. Many administrators expressed objections to serving minors under 18 in adult schools and felt that teachers of adults preferred that minors be excluded. Only 2.2% of students were under 18; 14.3% were between 18 and 21; 83.4% were adults. Among the teachers surveyed, 87% had no objection to minors enrolling in their classes; the majority felt that adults who dropped out did so for reasons other than the presence of minors. Thirty percent of minors were enrolled in academic subjects. Minors did better, as evidenced by persistence and grade achievement, in classes with a high ratio of minors to adults; 57% of minors completed the class in which the questionnaire originated; and 68.5% of minors enrolled in academic classes completed their course of study.

- *465 A STUDY OF THE RELATIONSHIPS BETWEEN SOCIOECONOMIC STATUS AND REASONS FOR PARTICIPATING IN ADULT EDUCATION PROGRAMS IN THE CITY OF BALTIMORE, MARYLAND. Lynk, William Alexander. Michigan State Univ., 65-8394, MF \$3.00, HC \$9.25, 203p., 65.

A study was made of relationships between the socioeconomic status of public school adult education participants in Baltimore, Maryland, and their reasons for participation. A constructed questionnaire and the official enrollment records of the Baltimore Public School Adult Education Program were the basic information sources used. Within the sample of 435 persons, only three fairly well defined socioeconomic classes were revealed, all near the bottom of Warner's socioeconomic scale. Types of activities were categorized. The greatest participation was in activities directly or indirectly related to academic work; second greatest participation was in activities related to job or wage improvement. Reasons given for participation (a total of 26) were classified into three groups, whose relationships to socioeconomic status were then studied. Results gave substantial evidence that participation was largely for academic and economic reasons.

- *466 IMPROVING ADULT EDUCATION OFFERINGS THROUGH CONSOLIDATING LOCAL SCHOOL DISTRICTS. Shader, Don Robert, Michigan State Univ., 65-14,273, MF \$3.00, HC \$5.60, 111p., 65.

To illustrate the advantages of a coordinated adult education program the combined programs of three school districts of Macomb County, Michigan, were analyzed and compared with programs in three other districts in the same county. The study focused on a period of time from September, 1961 to June 1963. It was hoped that the second three or separated districts might be improved and serve as both a pilot study and a basic incentive for similar school districts to improve their programs. The study attempted: to show the procedures necessary to develop a coordinated program within the separated school district; to present a basic incentive toward developing improvements as prescribed by literature and leaders in the field; and to show the need and advantages of sound leadership and direction in programing for adult education. The basic conclusion of the study was that in addition to improving budgeting, consolidation meant more competent leadership, a broader and more diversified program, increased participation, more qualified teachers, more extensive facilities, and a more comprehensive use of existing equipment and buildings.

- 467 THE DEVELOPMENT OF PUBLIC SCHOOL ADULT ACADEMIC EDUCATION IN LOUISIANA. Schumacher, Edward Daniel. Louisiana State Univ., 65-6421, MF \$2.75, HC \$8.00, Ed.D. thesis, 172p., 65.

An historical review of public school adult academic education in Louisiana describes the low levels of education available in the early 20th century, and the factors in the progress from an adult illiteracy rate of 35.7 per cent to 21.3 per cent between 1940 and 1960. Among the conclusions of the study are: a serious problem of low educational

attainment has existed in the state for several decades; public school officials have made strenuous efforts for years to alert the public and the state's political leaders to the importance of taking action to mitigate the problem; some progress has been made in the effort to upgrade the educational level of Louisiana adults, but these efforts have been intermittent, limited in scope, and inadequately financed; many adults with limited educational attainment have failed to participate in public school adult academic education; there is reason to question the qualifications of many teachers engaged in adult education and to re-examine the schedule for adult classes, the supervision policies, the instructional materials used, and the methods involved in teaching; and a general public apathy prevails regarding the low adult educational level in Louisiana.

- 468 PUBLIC SCHOOL ADULT EDUCATION IN SELECTED NEBRASKA SCHOOLS. Lightbody, James Edgar. Nebraska Univ., 67-9833, MF \$3.60, HC \$12.60, Ed.D. thesis, 277p., 67.

This study surveyed the role of public school adult education in Nebraska. The need and rationale for adult and continuing education in Nebraska, the place of adult education in the public schools, the role and responsibility of boards of education and school administrators, and the part played by the state and Federal governments were considered. A literature survey was done, as well as an examination of the Nebraska "Annual Term Summary Reports" and annual and biennial State Superintendent's reports. Recommendations pertaining to curriculum expansion and to program financing, administration, and status were based on these sources. Findings included the following: (1) there is much evidence that public schools should be actively involved in providing adult education and should be comprehensive; (2) school superintendents must accept and actively support adult education; (3) the Federal government has given public school adult education considerable support and leadership; (4) despite a long history and some noteworthy programs, public school adult education in Nebraska has not kept pace with national trends and has not yet been fully recognized as an integral part of the school systems; (5) the state of Nebraska provides no financial aid to adult education.

- *469 THE DEVELOPMENT OF GENERAL ADULT EDUCATION IN FLORIDA UNDER THE MINIMUM FOUNDATION PROGRAM. Meeth, Louis H., Jr. Florida State Univ., 65-15478, MF \$4.35, HC \$17.10, Ed.D. thesis, 380p., 65.

Largely based on a historical review of selected demographic and socio-economic data, this study documented, analyzed, and appraised the development of public school general adult education in Florida. Data were obtained on the scope and functions of Florida adult education programs before 1947, the development and organization of the General Adult Education Program from its founding (June 1948) through June 1962, the educational needs of Florida's adults, and program effectiveness and adequacy in meeting these needs. On the basis of findings relating to literacy and elementary education, high school completion,

civic and public affairs education, cultural and liberal education, and education for aging, recommendations were made in such areas as the financial support and legal status of the programs, the recruiting of students for basic education and high school completion courses, and periodic studies and surveys. The document includes an appendix, 28 references, 61 tables, and 11 illustrations.

- 470 ADULT EDUCATION IN THE STATE OF OKLAHOMA. Harrison, Arthur Reading. Oklahoma Univ., 66-10,498, MF \$3.00, HC \$9.25, 204p., 66.

The development of adult education in Oklahoma has followed the general American pattern. After World War II, several Oklahoma public schools began adult education programs and later took advantage of Federally supported vocational and literacy programs. However, differing attitudes toward educational purpose and financing between eastern and western Oklahoma have had an adverse effect on both adult and public school education and have created a variety of needs. Oklahoma spends about \$4,000,000 yearly on adult education, largely withing state institutions for rehabilitation or for explaining or promoting the work of state agencies. The State Department of Education has a Division of Vocational Education, which works with many adults, and has created the Office of Adult Education to administer Title II-B (basic education) of the Economic Opportunity Act. The Oklahoma Legislature should recognize and adequately finance adult education as a legitimate obligation of the public schools.

- *471 A SURVEY OF FEDERAL LEGISLATIVE INFLUENCE ON PUBLIC SCHOOL DISTRICT ADULT EDUCATION IN MICHIGAN. Draper, William B. Michigan State Univ., 68-4123, MF \$3.40, HC \$11.95, 262p., 67.

The purpose of the study was to relate specific changes occurring in Michigan adult education programs to federal education legislation. A questionnaire on: (1) general information concerning administrative aspects of program development, (2) fiscal and enrollment data in regard to federal legislative enactments, and (3) responses of administrators concerning influence of those enactments on specific aspects of their program, was submitted to administrators of 185 Michigan public school district adult education programs. The resulting data were organized according to three population stratifications--(1) federally and non-federally funded districts, (2) legal classifications of school districts, and (3) geographic areas of three general population densities. It was found that federal legislation caused increases in expenditure of local taxes, number of administrators employed, employment of especially trained adult educators, and total number of adult education courses. Although the need was great, federal adult education legislation had not approached the potential of which it was capable in Michigan. State aid was considered more important to program promotion than federal aid in federally funded districts. Recommendations for adult education programs and researchers are cited in relation to the findings of this study.

- *472 A STUDY OF ADULT EDUCATION OPPORTUNITIES FOR AN UNDERPRIVILEGED COMMUNITY. Stanbury, Harry Douglas. Michigan State Univ., 66-8492, MF \$3.00, HC \$7.00, 147p., 65.

This study aimed at describing: the forced attachment of two suburban districts and the extension of adult education opportunities to a disadvantaged community, the process and actions involved in establishing the Carver School Adult Education Program, and the attempt to provide educational opportunities for the adults of the Carver School area. Data came from a variety of sources: newspapers and magazines, official minutes and other important records of the Oak Park School District, unpublished pamphlets and research, and personal documents of school officials. Data were also received through interviews with persons directly involved with the proceedings. Following were some conclusions reached by the writer: political expediency rather than a planned and orderly procedure preceded the dissolution of the Carver School and its eventual attachment to the Oak Park School District; citizens and school officials felt that insufficient planning had taken place prior to the attachment; volunteer instructors and the professional help and donations of several social agencies aided the founding of the Carver Adult Education Program and other portions of a Community School Program; and there is still a need for basic education and vocational retraining.

- 473 THE IMPACT OF FIVE YEARS OF ADULT ACADEMIC EDUCATION IN A SELECTED SCHOOL SYSTEM IN LOUISIANA. Bertrand, John Avery. Texas Univ., 66-14,353, MF \$3.00, HC \$8.40, 183p., 66.

A study of 486 graduates of the adult academic education program in a Louisiana parish school system investigated whether such a program had a positive effect on its graduates, and whether program impacts would vary by sex, age, and number of years since completing the program. A special socioeconomic questionnaire was administered in interviews with 30 respondents. Findings included the following: (1) graduates had greater influence on the education of offspring and friends than on spouses; (2) graduates added such items as newspapers, magazines, stereos, telephones, and air conditioning to the home, voted more often, showed increased interest in schools and in national and state affairs, and joined civic, social, or church organizations; (3) they also moved into more skilled jobs, had an average annual salary increase of about \$1,000, and were happier in their jobs; (4) women graduates enrolled in college more frequently, voted more often, held more offices in organizations, and added more magazines to the home, than men; (5) men held better jobs, were employed more often, and had more income than women; (6) younger graduates indicated greater salary increases than older graduates.

- 474 IMMIGRANTS AT SCHOOL: NEW YORK CITY, 1898-1914. Berrol, Selma Cantor. City Univ. of New York, 67-12,555, MF \$5.60, HC \$19.80, 438p., 67.

The objectives of the investigation were to find out what changes were made in the educational structure of the city under the pressure of Jewish and Italian immigrants, and to determine if there were any clues sixty years ago to the viability of the New York City schools of today. The period selected was 1898-1914 and the major sources used were the records of the New York City Board of Education and the periodicals of the day. Part I of the study gives the background for change; Part II deals with the changes themselves; and Part III evaluates the innovations and presents their implications for today. Among the innovations were the growth of kindergartens, high schools, and vocational schools; the start of after-school recreational programs, and of summer schools; the attempt to open the school to all children; the inclusion of subjects such as physical education and manual training; and the use of schools as social service agencies.

See also: SECTION 5230 ADULT BASIC EDUCATION; 5300 ADULT SECONDARY EDUCATION; Item 346 characteristics of secondary vocational trainees with poor work potential; 344 effects of vocational education on career patterns; 342 follow-up of cooperative training program; 491 public school participants compared to participants in church program; 422 effects of parent education on third grade arithmetic achievement; 406 music offerings in public school programs in U.S.; 375 effectiveness of vocational agriculture in soil conservation; 369 model to assess returns in farm management program; 388 adult farmer education in India; 351 evaluation of manpower program in Lincoln Public Schools; 236 aspirations of low socioeconomic status adults; 199 methods of followup of vocational students; 198 training needs of public school adult education directors; 284 personal influence of lay leaders in community school program; 286 experimental civil defense program; 285 contributions of Mott Foundation; 133 space and facilities for evening programs in New York state; 2 relation of programs to state fiscal policies in Michigan; 9 personality needs related to participation and achievement; 23 survey of students in adult classes in Washington state; 38 educational interests of adults in Sioux City; 43 evaluation of guidance program in Los Angeles

7900 BUSINESS AND INDUSTRY

- 475 INDUSTRIAL POLICIES AND PRACTICES IN THE EMPLOYMENT OF RETIRED MILITARY PERSONNEL. Jensen, Alvin Carl. George Washington Univ., 67-15,932 MF \$3.20, HC \$11.25, Ed.D. thesis, 246p., 67.

A study was made of the policies and practices of 750 of the largest United States corporations (500 industrial firms and 250 commercial banks, life insurance companies, merchandising firms, transportation companies, and utilities) in employing retired military personnel. The importance of age, education, and military experience was examined. Findings indicated the following: (1) industry lacks separate policies on employment of military retirees beginning second careers; (2) military rank played no significant role in the employment of military retirees employed since January 1, 1964; (3) industries surveyed did not actively recruit military retirees but would, for the most part, welcome applicants; (4) the majority of the sample and the largest number of job openings were in the middle Atlantic and north central states; (5) excessive starting salary sought was the reason most often given for not hiring retired military applicants; (6) college education was preferred for applicants for professional and managerial jobs and high school education, for the skills and trades; (7) retirement benefits were available to all employees with two to 15 years' service; (8) a need exists to translate military job and school experience into usable and needed civilian equivalents.

See also: SECTIONS 5700 - 6125 PROFESSIONAL, TECHNICAL CONTINUING EDUCATION; 6150 TECHNICAL EDUCATION; 6200 MANAGEMENT AND SUPERVISORY DEVELOPMENT; 6300 LABOR EDUCATION; 6500 - 6850 OCCUPATIONAL TRAINING; 8000 ARMED FORCES; Item 231 employment of married women college graduates in business offices; 116 business use of university audio-visual center in Detroit; 13 delayed gratification patterns in MDTA program; 79 survey on use of programmed instruction in company training

8000 ARMED FORCES

- 476 HISTORY OF THE ARMY GENERAL EDUCATIONAL DEVELOPMENT PROGRAM: ORIGIN, SIGNIFICANCE, AND IMPLICATIONS. Strehlow, Louis Harold. The George Washington Univ., 67-15,939, MF \$3.00, HC \$9.45, Ed.D. thesis, 209p., 67.

The changing and expanding aspects of adult education in the armed forces from the years prior to World War I to 1967 are reported. Previous to, and during, World War I, civilian welfare groups provided recreation and entertainment for soldiers. The army began taking responsibility for

soldiers' morale by establishing a Morale Division in 1941 and by organizing the United States Armed Forces Institute. Literacy training was conducted by the Adjutant General during World War II. The Army Education Program provided correspondence courses, leisure time activities, counseling, and foreign language training. The present GED program, established in 1956, conducts off-duty educational programs (elementary through graduate-level courses) under civilian educators. The present civilian educational level of Army personnel is the highest in the history of the army; the provision for educational opportunities for soldiers will undoubtedly be considered one of the outstanding adult education innovations of the century.

- 477 THE ARMY GENERAL EDUCATIONAL DEVELOPMENT PROGRAM IN THE CONTINENTAL UNITED STATES: A SURVEY RELATIVE TO PRINCIPLES AND PRACTICES OF ADMINISTRATION AT THE ARMY POST-LEVEL. Westerland, Stuart Rudolph. Michigan State Univ., 64-977, MF \$2.75, HC \$9.25, Ed. D. thesis, 203p., 63.

This study sought to develop a set of administrative principles and practices as guidelines in conducting the Army General Educational Development (GED) program at the army post level. From interviews with the post directors of GED at ten Army Education Centers, it was determined that supervision, guidance, and personnel administration are the important areas of GED administration. Literature on the GED program was also reviewed. Out of 150 principles and practices listed on a rating form and submitted to GED directors and a panel of experts, 82 were considered important by the panel and the field at large. These were among the conclusions reached: (1) GED goals and objectives are continually being raised, and increased command support contributes to achievement; (2) although the GED program is unique in certain ways, there are similarities between selected guidelines governing certain aspects of public school administration and those applicable to Army GED programs and to the operation of the Army Education Centers; (3) there is much agreement between the formulators and the implementers of GED program policy.

- 478 A STUDY OF THE COMMISSION ON IMPLICATIONS OF ARMED SERVICES EDUCATIONAL PROGRAMS, 1945-1948. Price, Herbert Hamilton, Jr. Rutgers, The State Univ., 68-8646, MF \$3.00, HC \$8.00, Ed. D. thesis, 173p., 67.

In 1945, the American Council on Education created the civilian Commission on Implications of Armed Forces Educational Programs to study the armed forces education of World War II and its possible effects on postwar civilian education. Those features of the wartime training and education programs which appeared to be worthy of adaptation and experimentation in peacetime civilian education have been explored. In this study, pertinent information was gathered by examining all the publications of the Commission, selected publications of the American Council on Education, and other relevant source materials. Interviews were held with the director and the assistant director of the Commission. Significant events and issues considered by the Commission were explored, and the origins and development of the Commission were reviewed. Specific aspects of its work (including

merits and weaknesses of the intensive "G.I. Method," accelerated programs, program supervision and evaluation, language and area training, use of visual aids, integration of subject matter, and differences between special Army and Navy programs) were discussed in detail. Conclusions and recommendations for possible use of this study were set forth.

- 479 NON-MILITARY EDUCATION IN THE UNITED STATES ARMY AND AIR FORCE, 1900-1960. Schwartz, Rudolph. New York Univ., 64-6542, MF \$3.60, HC \$12.60, Ed.D. thesis, 279p., 63.

Using data from official Army records and other sources, the evolution of Army and Air Force nonmilitary education, 1900-1960, was traced, with emphasis on the period 1948-60. Nonmilitary Army education, nonexistent before 1866, had received scant attention before 1900: World War I led to the first extensive educational program in the Army, with domestic and overseas activities in literacy, secondary, higher, and vocational education. Community and service organizations lent important help. However, postwar reductions in appropriations had the effect of de-emphasizing education and re-emphasizing drill and garrison life. World War II produced an elaborate literacy program and the college level Army Specialized Training Program, together with off-duty education during and immediately after the war through such sources as foreign universities and the United States Armed Forces Institute. During 1948-60, both the Army and the Air Force made education an adjunct of military life, the aim being to improve morale, reduce boredom and disciplinary problems, facilitate recruitment, provide better trained and educated personnel, and develop a better fighting man.

- 480 AN ANALYSIS OF THE ARMY OFFICER STUDENT. Fullerton, Leroy Robert. George Washington Univ., 67-15,930, MF \$3.00, HC \$7.20, Ed. D. thesis, 155p., 67.

This study evaluated the advantages of formal higher education in establishing a second career for retired Army officers. Primary sources of data were Army officer students and recently retired officers. These were among the conclusions: (1) high response to the survey showed interest in, and career-related importance attached to, higher education; (2) 94% of students and 68% of retirees have baccalaureate degrees; (3) most students are seeking master's and doctoral degrees; (4) advancement in rank is correlated with educational attainment; (5) military schooling for students, based on rank and longevity, is very high; (6) academic education and professional education are closely interrelated; (7) reported incomes of retirees are high (over \$10,000 for the majority); (8) direct application, service friends, resumes, and contacts on the job were used by retirees to find positions; (9) counseling and guidance service is inadequate for both students and retirees; (10) there are ample opportunities within the Army for virtually every career officer to continue; (11) satisfaction, challenge, and prestige rank with financial considerations in the choice of new careers; (12) restrictions imposed by the Dual Compensation Act have a damaging effect.

- 481 AN EXAMINATION OF THE TRANSFERABILITY OF CERTAIN MILITARY SKILLS AND EXPERIENCE TO CIVILIAN OCCUPATIONS. Richardson, Robert Brooks. Cornell Univ., MF \$3.60, HC \$12.60, 277p., 67.

The occupational structures of the armed forces and civilian industries have converged to a higher degree today than ever before. The resulting transferability of most technical skills is a two-way process; while this study has focused on the military to civilian flow, a reciprocal process also operates effectively. The typical separatee from the armed forces of today makes the transition to civilian employment with ease and success. A small proportion of separatees, (those who held nontechnical positions in the military) encounter some difficulty in securing satisfactory employment. A need exists to provide all separatees additional guidance and job availability information before or during their exit from active duty. Improved manpower services to nontechnically skilled servicemen are essential to the complete development and use of their potential abilities. A latent but significant skill evolving from service as an officer on active duty is managerial and administrative proficiency. Recognition and further development of this potential is of great importance to civilian employers. Formal education interacts selectively with skills and occupations and is often the main determinant in qualifying ex-servicemen for civilian employment. (The document includes 50 illustrations, 18 references, and an appendix.)

See also: 6100 CONTINUING EDUCATION IN MILITARY PROFESSIONS; Item 323 employee training in Department of the Navy, 1958-1962; 242 rehabilitation of functionally psychotic veterans; 303 predicting success in Army medical training; 82 autoinstructional program in use of Air Force fiscal account codes

8100 RELIGIOUS ORGANIZATIONS

- *482 MAJOR TRENDS IN INTERDENOMINATIONAL ADULT EDUCATION, 1936-1964. Stokes, Kenneth I. Chicago Univ., MF \$2.00, HC \$24.35, 485p., 65.

A historical survey of cooperative Protestant adult education in America was conducted to systematize the major developments in this field. The survey focused on activities and programs developed cooperatively by denominations and interdenominational agencies at the national level 1936-1964. Based upon preselected criteria, 4 denominations provided much of the resource data--(1) The United Presbyterian Church, U.S.A., (2) The Christian Churches (Disciples of Christ), (3) The Church of the Brethren, and (4) The Methodist Church. Conclusions of the study were divided into major trends in the philosophy of interdenominational adult education, major curriculum trends, major methodological trends, significant turning points that brought about patterns of change, changes in relationship of interdenominational planning and denominational programing, major societal factors of influence, and ways in which developments in adult and religious education influenced corresponding developments in cooperative interdenominational adult education. Further research and development were recommended.

- *483 HISTORY OF ADULT JEWISH EDUCATION IN FOUR NATIONAL JEWISH ORGANIZATIONS. Cohen, Samuel I. Yeshiva Univ., 67-14,567, MF \$5.45, HC \$19.35, Ed. D. thesis, 426p., 67.

Since the end of World War II, national Jewish membership organizations have been giving increasing attention to adult Jewish education. The development of adult education programs in four general cultural-service organizations--B'nai B'rith, The National Council of Jewish Women, The American Jewish Committee, and The American Jewish Congress--is reconstructed and analyzed in this study. The historical traditions of adult study in Jewish life beginning with Biblical precepts and practices, and the origins and development of general adult education in the United States are discussed. A review of the literature in adult Jewish education, in the history and sociology of American Jewry, in Jewish educational foundations, and in general adult education is included. Historical, sociological, and economic factors have influence the increased participation in adult Jewish education. (Appendixes are official documents of the organizations studied and a bibliography.)

- *484 THE DEVELOPMENT OF HEBREW ADULT EDUCATION AS RELATED TO NATIONAL CRISES FROM 1800 B.C. TO 220 A.D. James, Muriel Marshall. California Univ., 65-3011, MF \$3.80, HC \$13.30, Ed. D. thesis, 295p., 64.

In this study of the development of early Hebrew adult education as related to national crises, summaries of major crises and of the educational developments of dominant foreign powers and peoples (early Mesopotamians, Egyptians, Canaanites, Assyrians, Babylonians, Persians, Greeks, and Romans) are discussed chronologically. It is shown that, in spite of foreign domination and the inevitable acculturation process, the Hebrews, unlike other cultures, maintained their sense of identity because of their concern with theologically oriented adult education. Post exilic (especially Greek and Roman) events and influences are examined in relation to Hebrew scribal education, the rise of synagogues, and other educational trends. The Kalla, which arose among the Hebrews in Babylon in 220 A.D. as a result of the dispersion, is also described. Finally, comparisons are made between the responses of the ancient Hebrews to national crises and those made by contemporary Americans.

- *485 A SURVEY OF BASIC EDUCATIONAL OPPORTUNITIES AVAILABLE TO MEMBERS OF THE CHURCH OF JESUS CHRIST OF LATTER-DAY SAINTS. Cameron, J. Elliot. Brigham Young Univ., 67-571, MF \$3.00, HC \$9.70, Ed. D. thesis, 213p., 66.

To examine the historical background of educational programs of the Church of Jesus Christ of Latter-Day Saints, the Church population, and educational opportunities available to Church members, a questionnaire was sent to presidents of Church missions outside the United States. It was found that Church membership has increased rapidly and could increase by 20.3 percent above estimates, to 7,250,000 by the year 2000. The Church maintained schools, colleges, and a university in which secular learning was

available, and seminaries and institutes of religion adjacent to public schools in some parts of the world. Sufficient public schools were available in many countries, but in Central and South America, Korea, Hong Kong, and many islands of the Pacific where Church members reside, educational opportunities were limited. The Church has organized elementary schools in South America and elementary and secondary schools in Mexico and some Pacific Islands. A constant evaluation of educational opportunities available to members of the Church, a yearly assessment of changes in laws and institutions, and annual projections of Church population and age groups are needed to guide educational planning.

- *486 THE PHILOSOPHY OF ADULT EDUCATION OF THE ANGLICAN CHURCH OF CANADA. Peel, Donald Naylor. Indiana Univ., 68-2342, MF \$7.15, HC \$24.45, 563p., 67.

The adult education philosophy of the Anglican Church of Canada was critically analyzed in terms of basic principles and presuppositions, cultural factors in Christian education, concepts of maturity and of authority, characteristics of adult learners, teaching and leadership, group learning, and patterns of educational practice. Comparisons of Anglican positions were made with those in other philosophies of education. These were among the major findings and conclusions: (1) Anglican philosophy is essentialist-perennialist (based on constant fundamentals) but has many progressivist-reconstructionist (change-oriented, experimental, and secular) features; (2) the approach is reality-centered, incorporating learner needs and Church requirements; (3) although leadership is ascribed to the learning group, the leader is depicted as dominating the planning and evaluation of educational experiences; (4) the most serious lacks are: a systematic statement of educational philosophy, a clear and flexible plan for church adult education, and an effective concept of authority.

- 487 A COMPARATIVE STUDY OF THE THEOLOGICAL CONCEPTS OF THE 1964-65 ADULT PARISH EDUCATION CURRICULUM OF THE LUTHERAN CHURCH IN AMERICA AND THE ADULT AUGSBURG UNIFORM SERIES. Sperling, Gordon James. New York Univ., 67-11,129, MF \$3.00, HC \$7.60, 161p., 67.

This research aimed at discovering, identifying, and analyzing the theological concepts embedded in the adult education sections of the Lutheran Church in America Parish Education Curriculum series for 1964-65, evaluating them in terms of the theology of the Lutheran Church, and comparing them with, and distinguishing them from, the Augsburg Uniform Lesson Curriculum Series for adults. The basis for the examination of the doctrinal content of the curricula was the reaction of professors of systematic theology in twelve United States Lutheran seminaries to a set of theological statements on Lutheranism. The comparison was made in terms of doctrinal content by the comparison of passages, and an examination of the content in the light of the formulated statements. There was also a tabulation of the frequency of occurrence of theological concepts within the two curricula. The results showed that there is no significant difference between the amount and nature of the doctrine taught in the two curricula, although the scope in dealing with certain doctrines is broader in the new Lutheran Church in America Parish Education Curriculum than in the Adult Augsburg Uniform series.

- 488 THE DOCTRINE OF THE HOLY SPIRIT IN ADULT CHURCH SCHOOL LITERATURE OF THE METHODIST CHURCH, 1941-63. Lovett, Miller Currier. Boston Univ., 64-11,650, MF \$6.25, HC \$22.30, 492p., 64.

The problem of this thesis was to discover and evaluate what had been written about the doctrine of the Holy Spirit in selected adult church literature of the Methodist Church from 1941-63. A combination of historical, descriptive, and analytical methods was used. Criteria were formulated and used to discover how the doctrine was treated in the church school literature. Selected curriculum series were analyzed and evaluated. The Basic Christian Books and the Adult Bible Course ranked first in the treatment of the Holy Spirit. The International Lesson Series in Wesley Quarterly was in second place, and the International Lesson Series in Adult Student in third. The Adult Fellowship Series and its predecessors had the lowest rating. In all series, the period 1952-63 showed a sharp increase over the period 1941-52 in emphasis on the doctrine. The nature of the Spirit was most frequently treated as "divine activity", and the work of the Spirit was "empowerment-life giving". The student was given very little specific assistance in learning how to appropriate the benefits of the Holy Spirit.

- 489 A SURVEY OF THE USE OF THEOLOGICAL TERMINOLOGY WITH REFERENCE TO JESUS CHRIST IN SELECTED CHURCH SCHOOL CURRICULA FOR ADULTS. Hubbard, Helen Kathryn. Pittsburgh Univ., 66-13,485, MF \$3.05, HC \$10.60, Ed.D. thesis, 234p., 66.

Purposes of this study were to determine the Christological emphasis in selected adult church curricula for the years 1942, 1952, and 1962 regarding the person, mission, resurrection, and second advent of Christ; and to assess the influence of the theological renaissance on these curricula. Materials were those of the American Baptist Convention, Christian Churches (Disciples of Christ), Methodist Church, and United Presbyterian Church in the U.S.A. Belief concerning Christ's resurrection was the strongest and most consistent doctrine in all the lessons. Theories on Christ's person and mission were varied, most obviously so between 1942 and 1952. The second advent was hardly mentioned in 1942 and 1952 but received much attention in 1962. The theological renaissance has evidently influenced all four lesson series, most noticeably the Methodist and Presbyterian materials. Particularly in 1962, the materials for leaders and pupils showed the effects of this ferment in terminology, a stronger theological and Christological emphasis, more questions and open discussion on the person and work of Christ, and a new emphasis on the second advent.

- 490 ADULT RELIGIOUS EDUCATION: THE QUEST FOR "HOLY INSECURITY". Shaw, Robert Clyde. Wisconsin Univ., 67-12,475, MF \$3.35, HC \$11.70, 275p., 67.

The purpose of this dissertation is to examine adult educational policies of Protestant churches and to suggest adult educational objectives and implementation in the light of such an analysis. Included are a historical review of religious education in the twentieth century, focusing on the tensions, trends, and conflicts which developed in religious educational goals, methods and curricula, an examination of studies and research concerned with the learning potentiality of the middle-aged adult and the possibilities open to his further growth; and an overview of how the adult learns. Based on the results of a questionnaire, a section attempts to examine the basic problems of adult education in the church. An effort is made to clarify educational assumptions and definitions before delineating the educational objective of religious adult education as offered by the dissertation. For this purpose, a comparison of the views of various educators, philosophers, and psychologists, and their use of the concept is made, and several illustrative paradigms and models are offered. It is concluded that the "crisis" of middle age is an opportune time for religious educational efforts.

- 491 SELECTED PERSONAL CHARACTERISTICS AND VALUES OF PARTICIPANTS IN SECULAR AND RELIGIOUS ADULT EDUCATION PROGRAMS IN MOUNT LEBANON, PENNSYLVANIA. Uhl, Harold John. Pittsburgh Univ., 68-7519, MF \$3.00, HC \$6.20, 129p., 67.

A study compared two groups of adults in a suburban community who were attending weekly classes on a voluntary basis. One group attended avocational classes in the public school and the other, classes in a Protestant church. The purpose was to learn whether sex, occupational role, family status, family background, education; influence of friends, personal needs and goals, or a sense of commitment differentiated the groups. A total of 118 persons were interviewed, given the Allport-Vernon-Lindzey Study of Values, and classified by the Hollingshead Two Factor Index of Social Position. The churches had greater appeal to persons in the highest social position, who had interest in others, sought friends or enjoyed a certain teacher, and felt obligation to the church. Public school classes had greater appeal for persons who liked more precise knowledge, sought creative expression and relaxation, a sense of accomplishment, and practical skills. No other significant variation was found. The study called for a program of adult education experience designed to enhance stability and wholeness, Christian living, and adult expression of faith.

- *492 THE THEORY OF TRAINING AND THE TRAINER ROLE IN THE INDIANA PLAN INSTITUTE. Frye, Royce Melton. Indiana Univ., 64-5127, MF \$2.75, HC \$8.80, Ed. D. thesis, 194p., 63.

The theory of training in the Indiana Plan Institute was investigated and the nature of the trainer role as its focal means of actualization was analyzed. Data were gathered from literature and the investigator's training experience. Five categories were chosen for study: (1) educational conditions and results of the Indiana Plan, (2) nature of the Institute, (3) theory of Institute training, (4) the trainer role, and (5) standards, issues, and problems of Institute training. It was found that educational conditions in the Plan are the embodiment of: principles

of learning in a democratic context, principles of method for collaboration among adult learners in the process of growth, and tasks to be performed in training adults how to learn. An antecedent-consequent relationship obtains between the educational conditions and results of the Plan. The structured learning situation provides three types of training--in-group participation, out-group participation, and transfer. Among concepts integral to training theory are: authoritative guidance, feedback, reinforcement, and group self-appraisal. The trainer role is conditioned by such variables as--curriculum, composition of the training group, and his educational philosophy.

- *493 AN ANALYSIS OF SELECTED ASPECTS OF JAMAICAN CULTURE WITH IMPLICATIONS FOR ADULT EDUCATIONAL PROGRAMS IN THE CHURCH. Gerig, Zenas E. Indiana Univ., 68-2294, MF \$3.00, HC \$7.40, 157p., 67.

This study has analyzed selected aspects of Jamaican culture--education, religion, and family relations--in order to present suggestions for the church's adult education programs. The family is basically maternally oriented and marked by a predominance of early nonmarital sex relations and a lack of consistent intimacy and faithfulness in marriage. Protestantism is the leading religion. The older established churches are struggling to hold their membership but are making strong efforts in various social involvements. Membership in the younger churches is constantly growing, but these churches lack social interest. Jamaica's educational system is marked by a traditional "academic" emphasis, with a low percentage of school-age children attending secondary schools. The expansion of educational facilities cannot keep up with the high rate of population growth. A large proportion of adults are functionally illiterate. Plans are under way to make school places available to all children and to make attendance compulsory. The church's adult program in Jamaica, including instructional materials and leadership, must be adult-centered, need-centered, and as indigenous as possible. A type of training is recommended that will involve Jamaican adults in identifying needs and forming their own programs. (The document includes 88 references.)

See also: Item 408 a Christian theology specifically for adults; 409 Protestant policy and adult education about education; 200 Q-sort in measuring attitudes toward Indiana Plan; 186 ministers' perception of needed adult education competencies; 185 content analysis National Conference on Adult Jewish Education; 184 seminary courses in adult education; 183 adult education competencies needed by Episcopal priests; 182 emphasis on adult education in Methodist Church in Indiana; 100 participation training in church groups; 83 programmed instruction for training church workers

8200 LIBRARIES, MUSEUMS

- *494 THE EDUCATIONAL COMMITMENT OF THE AMERICAN PUBLIC LIBRARY, 1833-1956. Lee, Robert Ellis. Chicago Univ., 201p., 63.

The purpose of this study was to determine in what way the interpretation and implementation of the library educational commitment to adults changed between 1833 and 1956. Primary documents were the chief sources of data; however, because comprehensive documentation of the American Public Library movement did not begin until 1870, secondary sources of accepted authenticity had to be relied on for data on the period 1833-1875. The major findings revealed three distinct phases in the development of the public library as an educational institution. First, the library began as a single-purpose institution in which education for adults was the central aim. Next, it became a multi-purpose institution in which education, recreation, and reference were the primary objectives, with recreation and reference eventually taking precedence over education. Third, it entered a period of appraisal in which attempts were made to revitalize its educational objective. By 1956, an increased number of librarians were beginning to recognize their obligations to all of the library's aims and to understand that a public library must be simultaneously educational, informational, and recreational.

- *495 THE ROLE OF THE PUBLIC LIBRARY IN RETRAINING PEOPLE DISPLACED BY TECHNOLOGICAL CHANGE. Hutcherson, Ethel Madge. Florida State Univ., 67-8470, MF \$3.00, HC \$5.40, 108p., 66.

A study was made to determine what library administrators think is the role of public libraries in retraining of adults, what libraries are doing to provide training, and how they differ when classified by size of population served. About 600 libraries serving populations of 50,000 or more were studied. Aspects examined were: age of library, location, branches, adult services coordinators, staffing, facilities, and attitudes toward the problem of technological displacement. Most of the administrators agreed that libraries should provide materials for adult basic and vocational education, develop information resources, cooperate with other community agencies, evaluate their own programs, and offer guidance and counseling materials and services. Few retraining programs were in progress or being planned; however, the larger the population base, the greater was the likelihood that certain services would be provided. (Tables and references are included.)

- 496 AN ANALYSIS OF THE ORGANIZATIONAL DEVELOPMENT OF FOUR MUSEUM ADULT EDUCATION PROGRAMS AND THEIR EFFECT UPON THE ADULT PARTICIPANTS. Zernich, Theodore, Jr. Pennsylvania State Univ., 68-8765, MF \$3.00, HC \$7.20, Ed. D. thesis, 152p., 67.

The population for the study consisted of the educational directors of The Museum of Modern Art, The Philadelphia Museum of Art, The Baltimore Museum of Art, and The Carnegie Museum of Art, and 259 participants in the museum programs for amateurs in art. Nine propositions were used to give information on the structure of the programs. An attitudinal questionnaire was given and measured through the use of Chi Square and the Fattu

Significance of Difference of Percentages Scale. The general finding is that the adult art programs have taken on a service nature. The programs are highly adaptive to the interests of the adults when an interest is expressed in a certain area of study. This adaptive approach does not specify educational ends; instead, it specifies an undirected program that can be categorized as laissez faire. This extreme flexibility encourages a general ambiguity in the program. An overview of popular response to the education division reveals a relatively high degree of support. The appendix includes a bibliography and the questionnaire used.

See also: Item 404 science education of adults in planetarium;
235 library branch services for adults of low education

8250 PROPRIETARY SCHOOLS

See: Item 176 survey of teachers in private trade and technical schools

8300 STATE AND LOCAL GOVERNMENT

- *497 THE ROLE OF ATLANTIC PROVINCIAL GOVERNMENTS IN ADULT EDUCATION. Gunn, C.R. Toronto Univ., (Ontario). Available from The Ontario Institute for Studies in Education, Library, Toronto, Canada. Ed.D. thesis, 290p., 67.

The role of the provincial governments of Newfoundland, Prince Edward Island, Nova Scotia, and New Brunswick in adult education varies somewhat in approach and definition. Research was carried out mainly through literature search, including the perusal of agency reports from the provincial governments under study. Several steps were found necessary: (1) defining adult education; (2) arriving at a consensus of opinion as to the role of government auspices in the four provinces; and (3) deciding if the reported activities remain within the limits imposed by the definition of adult education and if the displayed role of the governments is compatible with the suggested role. It was concluded that adult education should be defined simply as the education of adults, and that the programs of the provincial governments fit within this definition whether or not they are called adult education programs.

See also: Item 324 state employee development in Pennsylvania 1955-1963; 363 police training in New York City; 413 career of Esther Middlewood in Michigan State Department of Mental Health; 62 dogmatism among employees of Florida State Forest Service

8400 STATE AND LOCAL NON-GOVERNMENTAL ORGANIZATIONS

See: Item 22 factors affecting participation in voluntary organizations in Wisconsin County; 311 acceptance of training by volunteers in health agency; 214 Ohio Senior Centers; 239 participation of Objibway Indians in voluntary organizations; 3 Ben Franklin and the Junto;

46 characteristics of board members of Community Chest agencies; 61 research instrument on intraorganizational concepts applied to Michigan Livestock Health Council; 76 effect of mailed materials on volunteers in community service organization

8500 FEDERAL GOVERNMENT

See: SECTIONS 5230 ADULT BASIC EDUCATION; 6550 OCCUPATIONAL TRAINING OF UNSKILLED, DISADVANTAGED; 7600 COOPERATIVE EXTENSION SERVICE; 8000 ARMED FORCES; Item 174 employee development specialists in the Federal government; 290 community development division of ICA; 471 influence of Federal legislation on Michigan public school adult education; 279 agency roles in Title I, Higher Education Act; 280 Title I, HEA in Tennessee

8600 NATIONAL NON-GOVERNMENTAL ORGANIZATIONS

- 498 THE DIRECTORS: A PILOT STUDY OF VOLUNTEER PARTICIPATION IN DECISION-MAKING IN VOLUNTARY GROUP SERVICE AGENCIES. Loewenberg, Frank M. Wayne State Univ., 68-6660, MF \$4.70, HC \$16.65. 366p., 65.

This study investigated the participation pattern of volunteer directors of voluntary group service agencies, attempting to determine whether the type of participation in the critical decision-making process was associated with organizational characteristics. The employed executive director and two volunteer board members of the twelve agencies included in the sample were interviewed. The findings suggest that regardless of the nature of the critical decision involved, board participation tended to be associated with the following organizational characteristics: the complexity of the technical procedures used by the organization, the size of the organization's subsidy from another organization, the communications network, and the size of the agency. However, no relations were established for some other characteristics, including the goals of the organization, proportion of staff with professional training, reputation of the agency among social work educators, and proportion of agency budget subsidized by the central welfare fund.

See also: Item 326 training for March of Dimes workers; 423 YMCA Indian Guide program; 411 training needs of March of Dimes workers; 396 history of Great Books movement; 285 Mott Foundation contributions to community school program in Flint

9020 INTERNATIONAL AND COMPARATIVE STUDIES

See: SECTION 5280 LITERACY EDUCATION-FOREIGN; 5550 COMMUNITY DEVELOPMENT PROGRAMS-FOREIGN; 6780 AGRICULTURE, HOME ECONOMICS-FOREIGN; 9350-9800 ADULT EDUCATION IN FOREIGN COUNTRIES; Item 339 comparative study labor

and workers education in U.S. and Great Britain; 56 history of residential education; 129 listening groups; 485 education in Church of Jesus Christ of Latter-Day Saints outside U.S.

9350 CANADA

See: Item 497 role of Atlantic provincial governments in adult education; 289 present state of Antigonish movement; 239 participation of Ojibway Indians in voluntary organizations; 145 training needs of agricultural extension agents in Quebec; 486 adult education in Anglican Church of Canada

9400 LATIN AMERICA

- *499 THE USE OF ADULT EDUCATION IN THE EMERGENCE OF A NEW ORDER IN PUERTO RICO. Keimig, Joseph F. Chicago Univ., 292p., 64.

An historical account of Puerto Rico since 1493 and of adult education programs of Luis Manoz Martin and the Partido Popular Democratico since 1938 illustrate the social, economic, political, and cultural reform processes. The comprehensive and interrelated adult education programs were functional or experimental in solving immediate problems of illiteracy, ill health, substandard housing, isolation, poverty, poor land use, and political ignorance. Utilization of mass media, audiovisual aids, publications, phonograph records, and itinerant teachers helped to achieve the educational goals.

See also: Item 493 implications of Jamaican culture for adult education; 383 perceptions of Mexican agricultural agents on objectives; 294 potential for community development in Kekchi Indian village in British Honduras; 265 relation of literacy training to modernization in Brazil; 163 adult education in public agencies in Puerto Rico; 112 nutrition education in Brazil; 5 work of Amanda Labarca in Chile

9500 EUROPE

- *500 A HISTORY OF ADULT EDUCATION IN GERMANY (1800-1933). Pirtle, Wayne George. California Univ., 66-15,469, MF \$5.00, HC \$17.80, 391p., 66.

German adult education before 1933 stressed group experience in the family, clan, and culture rather than knowledge and the individual. Outside trends, especially in England, Austria, Denmark, and the United States, repeatedly influenced the German movement. While lecture institutes, university extension, and other activities were important, the folk colleges were the greatest single force in German adult education. Grundtvig's emphasis on "intensive" adult education had a great impact on adult educators between the 1890's and 1933. A perennial goal was the healing of social divisions caused by regional differences, traditional class distinctions, and an elitist educational system based on

classical scholarship. Major weaknesses in German adult education were: poor communication between educators and participants, frequent failure to appeal to the working classes, lack of funds and respectability, lack of adequate facilities and cohesive organization, and inadequately trained personnel. Programs tended to be either "Old Direction" (formalistic), "New Direction" (broad and democratic), "neutral" (without controversial subjects), or linked with religious or political beliefs.

- 501 ADULT EDUCATION IN GERMANY. Huddleston, John. Leeds Univ., (England) Available from Micro Filming System, University Library, University of Leeds, Photographic Services, Leeds, England. 518p., 65.

This study is limited essentially to adult education in West Germany, although the historical sections include references to earlier experiences and experiments in areas now occupied by the Russians. The terms "adult education" and "workers' education" are clarified. Both are presented as separate movements. Brief reference is made to political, social, and economic conditions which have prevailed in the community life of Germany over the last century. Concentration is on the work of the Folk High Schools and the Trade Unions. Focus is placed on the special elements in German political, social, and industrial life which resulted in the German workers being excluded from practical politics until 1918. Attention is also directed to the speed of Germany's industrialization.

See also: Item 339 comparative study of labor and workers education in U.S. and Great Britain; 330 technological change and required educational adjustments in Germany; 386 American crop methods in Yugoslavia; 4 contributions of Adamantios Korais to adult education in Greece

9650 NEAR AND MIDDLE EAST

See: Item 115 plan for cooperative education in Iran; 295 rural development activities in Iran; 160 training for agricultural extension in Syria; 434 implications of U.S. university extension for Turkey; 484 Hebrew adult education 1800 B.C.- 220 A.D.; 113 demonstration method among Lebanese wheat farmers

9700 AFRICA

See: Item 131 farm radio forum in Ghana; 292 town meetings with tribal adults in Liberia; 130 radio education in Ethiopia; 384 higher education in agriculture in Ethiopia; 390 Azandi tribe in Southern Sudan; 162 training needs in agricultural extension in Western Nigeria; 291 adult education in rural communities of Eastern Nigeria; 385 agricultural extension in Nigeria; 387 rural life in Northern Nigeria; 444 role of Nigerian universities in adult education

9800 ASIA

- *502 ADULT EDUCATION IN PEOPLE'S REPUBLIC OF CHINA, 1950-1958. Lin, Vincent T.C. California Univ., 64-2092, MF \$6.15, HC \$21.85, 482p., 63.

Adult education in People's Republic of China is a basic condition for the transition to Communism and an instrument for consolidating the proletarian dictatorship and training personnel for economic development. It has three functions--eradicating illiteracy, creating a new type of citizen, and developing a new intelligentsia from the working classes. The guiding principle of the literacy campaign is the "mass line," which requires that adult education be a mass social movement, initiated and carried out by the people but rigidly directed and controlled at all levels by the Communist Party. This concept seems appropriate to a traditional, authority-oriented society and has succeeded in effecting mass behavioral change and avoiding some social dislocations normally originating in the change process. The Communists failed to solve many problems during the years 1950-58, among them the teacher shortage and the heavy demand on the learner's time. Communist adult education has simplified the written language, popularized the national common speech, and made literacy meaningful. Unsolved problems are due to inadequate means and an unrealistic acceleration of the program.

- *503 RED AND EXPERT: COMMUNIST CHINA'S EDUCATIONAL STRATEGIES OF MANPOWER DEVELOPMENT. Yang, Allency H. Y. California Univ., 65-13,623, MF \$3.50, HC \$12.15, 270p., 65.

During the Second Five-Year Plan (1958-1962), the Chinese Communists expanded spare-time adult education schools to part-work, part-study Red-and-Expert universities and schools to provide ideological indoctrination and cultivate socialist citizens (Red) and to train skilled manpower for modern industry and economic development (Expert). The program was to educate a disciplined, technical citizenry capable of working in many technical areas through a combination of education and productive labor, with schools setting up their own factories and farms and factories and agricultural cooperatives establishing schools. Programs were directed by the local Party Secretary with Communist cadres. The basic flaw in the experiment was the attempt to expand schools without state expenditures and to expand the program without affecting production. Nevertheless, approximately 90,000,000 people attended literacy classes and there are now more literate peasants and workers developing the Chinese economy.

- *504 A STUDY OF THE TRAINING PROGRAM AT TUFEK (THAILAND UNESCO FUNDAMENTAL EDUCATION CENTER). Khunmuang, Samrit. Cornell Univ., 65-6971, MF \$3.00, HC \$8.00, Ed. D. thesis, 174p., 65.

A study was made of how Thailand has shared in the general interest among developing nations in village improvement and of the type of training necessary to prepare competent village workers for Thailand. The philosophy and techniques of fundamental education and community development in general were discussed in relation to the geographical, demographic, and cultural setting. Training programs for community development workers in the Philippines, India; and Burma were compared with those in Thailand. An opinion survey was made of members of the 1961 graduating class at the Thailand UNESCO Fundamental Education Center (TUFEC). Using survey findings, his own observations and experience as a TUFEC instructor, and other insights, the author recommended greater stress on agriculture in the basic two-year training course, a new supervisory training course, use of correspondence courses and other methods relatively new to Thailand, and creation of liaison between the local community development workers and their alma mater, TUFEC.

See also: Item 54 community development in Pakistan; 293 coordination of community development in Indonesia; 308 Philippine nursing students in the U.S.; 288 community development in India; 391 adoption among Indian farmers; 388 adult farmer education in India; 389 communication behavior of village workers in India; 320 in-service training in Indian school extension; 232 education of women for modern India

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